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# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME XVII—No. 6  
WHOLE NUMBER 190

GRAND RAPIDS, MICH., JUNE, 1918

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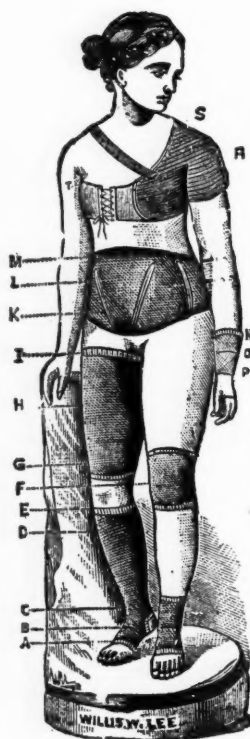
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No. 6

### Original Articles

#### THE DUTY OF THE HOUR IS SERVICE\*

ANDREW P. BIDDLE, F.A.C.P.

DETROIT, MICH.

I would be derelict to my strongest feelings did I not first take this opportunity to express to you, members of the Society here assembled for its 53rd Annual Meeting, my deep appreciation of the honor you conferred by choosing me to preside over your deliberations. Our depleted ranks, depleted by the war service of our absent members, renders the task more sacred. But it is to review in part the service of those of us who for one reason or another, be it age, disability, family dependents or responsibility, college or hospital association, have and must remain at home; *and to urge each one of us to greater service*, that we may in a measure be found worthy with our absent brothers, that I shall devote the short space of time allowed the presiding officer on this occasion. Not one of us but is proud of the devotion to duty of those who have been selected for service; we envy them the privilege. No one ever doubted but that the Medical Profession would be true to its ideals and to its traditions. The battle fields of Europe have proved, were proof needed, that the first have in no way been dimmed or the latter forgotten. All glory and honor to those who have gone!

#### STATE AND COUNTY COMMITTEES.

The magnitude of our fight for free institutions and democracy has enlisted the services of not a few of those at home, but should render obligatory the enrollment in one capacity or another in the service of the government of every member of our profession. The duty and hour of service is at hand; the privilege of rendering it we should grasp. Long before this country abandoned its neutrality to engage with our Allies in this world wide conflict

members of the profession had offered their services to the fighting and devastated countries of Europe and the profession at home had begun to organize in anticipation not of conflict—for it was then universally hoped and prayed for that we would not be drawn into the war—but for humanitarian purposes. This was exemplified more particularly in the work of the Red Cross when the final draft governing the "Regulations of the National Committee in Red Cross Medical Service" was approved May, 3, 1916, by the special committee to which these regulations had been referred. Under their provisions State committees of nine physicians were appointed, three members each of which were selected by the President of the American Medical Association, the President of the Congress of American Physicians and Surgeons and the President of the American College of Surgeons (one to be the President of the State Medical Society). This committee was later merged into the State Committee of National Defense. Local committees were to aid for enrollment for service in case of war of those "physicians willing to serve wherever needed, at home, abroad, in field, hospital, or supply columns or intelligence sections," those "willing to serve in the home country only" and those "willing to serve at place of residence."

In April, 1916, a National Committee was appointed by the above named Presidents in addition to the President of the American Surgical Association and the President of the Clinical Congress of Surgeons of North America, to which Committee was "delegated the responsible duty of formulating plans whereby the civilian medical resources of the United States might be ascertained and effectively coordinated for such purposes as might be referred by the Federal Government;" the President and the Secretary of the State Medical Societies to be members of their respective State Committee during their incumbency in office. "From the first it was contemplated that at the proper time the organization of committees

\*Presidential address, 53rd Annual Meeting, Michigan State Medical Society, Battle Creek, May 7th-9th, 1918.



would be perfected in each County of the Country," the County Committee "to bear the following distinguished name, to wit, The Auxiliary Medical Defense Committee of . . . . County of . . . . ., State." These Committees were to aid in gaining "needful information regarding the civilian medical resources of their own communities," and to aid "in the efforts to coordinate civilian medical activities for prompt mobilization in case of need;" to secure applicants for the Army and Naval Medical and the Medical Officers' Reserve Corps, the Coast Defense Reserve Corps of the Navy and for the National Guard.

By act of Congress, August 29, 1916, the Council of National Defense was organized "for the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the Nation." During October of 1916 and even earlier the Committee of American Physicians for Medical Preparedness began to take inventory of the hospitals of the Country. This list is complete and rests within immediate reach of the offices of the Surgeon-General of the Army and Navy in a circular letter of February 16, 1917, the Director General (Department of Military Relief) of the American Red Cross coordinated the work of the Red Cross with that of the Committee of American Physicians for Medical Preparedness by making the committees of the two organizations "as far as possible identical in composition." On March 5, 1917, a circular letter signed by the Chairman of the Committee of American Physicians, the Chief of the Medical Section, Council of National Defense, and the Medical Member of the Advisory Commission of National Defense, urged "that the various State Committees of the United States should more closely organize in order promptly to co-operate with the authorized national medical bodies and the established agencies of the Federal Government." Sub-committees in each County of 10,000 or more were organized to canvass and to establish as nearly as possible the status of every physician of less than 55 years of age as to his eligibility and desirability for a commission in the Medical Reserve Corps of the Army and Navy.

To simplify the activities of the various State committees reorganization by the General Medical Board was effected in May, 1917, these activities to be assumed by the newly named "State Committee of the Council of National Defense, Medical Section," the committee "con-

siderably to enlarge its membership by the addition of new members who are for one reason or another necessary to its greater usefulness." Let me pause here a moment to attest our sincere appreciation of the untiring, effective and patriotic labor of the member of our Society, who since the inception of the work in Michigan, early in 1916, has been Chairman of the various committees, Major Reuben Peterson, M.R.C., of Ann Arbor, Medical Aide to the Governor of Michigan. I feel I voice the sentiments of the profession of the State and the Country in extending our heartfelt thanks to him and am grateful of this opportunity of giving it public expression.

Physicians and Surgeons of State, National and International renown, many of whom have since entered into active service, have served and are serving on these Committees without thought of other remuneration than the consciousness of duty willingly and gladly performed.

#### MEDICAL EXAMINING BOARDS.

To examine the candidates for commission in the Medical Officers' Reserve Corps, Medical Boards were early appointed by the Surgeon-General and in this State established at Albion, Ann Arbor, Battle Creek, Detroit, Marquette and the Sault de Ste. Marie. To these boards has fallen the responsibility of the determination of the physical and the mental fitness of the applicants. Upon their tact and judgment has rested the reliance of the Government in the formation of the personnel of the Corps.

When the first draft was called, physicians in every county, village and city throughout the land freely offered their services to the Government as Medical Examiners. Their zeal and their work under the great difficulty of haste, inadequate quarters and lack of knowledge as to what constitutes fitness for military service have been praised again and again by the Provost Marshal General.

Profiting by the experience of the first draft, the Government, when its second call was to be filled, requested the Governor of the several States to nominate the members of the newly created Medical Advisory Boards. These boards, selected by the State Committee of National Defense (Medical Section) at the Governor's request, are scattered throughout the State and are composed of 3 to 7 physicians, trained in their several specialties, to aid in the great task of determining the physical and mental status of the registrants referred to



them. Hundreds of thousands of young men have thus received careful, expert physical examination at great sacrifice of the time and energy of the examiners without expense to the government.

#### PATRIOTIC COMMITTEES.

Patriotic Committees to provide social and financial aid to the family of a member in the service, where it may be necessary, and to secure a fund of sufficient size to meet the needs of the member upon his return; to safeguard his interest during his absence and to assist in the recovery of his practice on his return, have been formed in almost every county of the land. A great task has fallen upon the members of these Committees, requiring tact, discriminative judgment and a sincere devotion to an ideal. The method of procedure probably varies in each state, but in Michigan it has been found advisable to leave the solution to the individual county, where the needs and wishes of the absent member are best known.

#### HOSPITALS, COLLEGES AND STATE BOARDS OF HEALTH.

Great as has been the suffering of the smaller communities, for lack of physicians and severe the hardship imposed on those who have remained at home, not less arduous has been the task of the depleted staffs of the hospitals of the cities and the faculties of the Medical Colleges, depleted by the trained operator and the skilled physician and the trained and well beloved teacher. Yet ever in mind the sacrifices of those at the front, these tasks have been and will be unflinchingly borne by those who must remain at home.

Profiting by the mistakes and experiences of Great Britain this Government is already exercising a strong supervision over our medical schools, demanding in spite of the depletion of trained teachers that neither the quantity nor quality of the standards of teaching be diminished; demanding that each school shall fix and maintain its maximum of attendance, and bring its student to the highest point of efficiency and physical development for the service of his country; returning to his former registrant status the physical unfit and him who through lack of educational attainment or by temperament is unfit for military service. Its whip is that the medical student is with few exceptions within the draft age and is held in the enlisted medical reserve during the whole period of his studies and his subsequent hospital year; and, should he fail, is returnable

to his former status. To shorten the long periods of study somewhat the Government may determine that after October of this year every school hold a continuous course, thus saving the student one year in four. To this increasing obligation let us who teach also bend our energy.

These governmental demands and the hard economic condition of war times will probably drive a few schools to the wall. Fortunately some communities have recognized the great and probable greater demand of the civil population at home, the government and devastated and war torn countries of Europe for well educated physicians and have come to the rescue. It is hardly necessary here to go into the reasons for the increasing cost of medical education, but it may not be out of place to say that the City of Detroit has through its officials approved of the budget for the coming year submitted by the Board of Education for the maintenance of the Detroit College of Medicine and Surgery under the said Board and that the medical school will on July first come under the educational system of the City of Detroit. Thus is a great City with a vast educational machinery already in existence, with the abundant clinical material of its hospitals (both private and public) at its disposal, committed to undertake the education of medical students as part of its service to the Government and to humanity. Thus under the guidance of trained educators and under the immediate eyes of the State authorities and the Federal Government will the high standards of medical education be maintained and increased. If backed by the united profession of the City and the State, no greater opportunity to utilize its wonderful resources for the advancement of medical education and to make of the great metropolitan city of the State the medical centre which its importance should compel and to give service to our Government has ever been offered the profession. I cannot believe that it will fail to see clearly its duty and will stand shoulder to shoulder with the Board of Education of the City of Detroit in the latter's endeavors. Thus will the two Medical Schools of the State, the one supported by the State and the other by its City, press forward in the interest of higher medical education, rivals only for the honor of greater service.

State Boards of Health have in every way possible co-operated with the Federal Government to lessen the inroads of disease into our national cantonments and I may be permitted

to point with pride to the good work done by the Michigan Board with the co-operation of a Governor who recognizes the value of health supervision. So good has been the work accomplished that it has received special mention of the Medical Department of the Army and has been held up to other State Boards of Health as an example of what can be accomplished.

#### MEDICAL SOCIETIES AND JOURNALS.

Naturally the County and State Medical Societies have been the first and most seriously affected by the war, because of the absence of the members who are usually the most interested. Yet the work of these societies should be kept as active as possible in the interest of medical organization. Those at home should make increasing effort to maintain them in their present state of efficiency by frequent attendance and willing co-operation with the officers in perfecting the programs.

The great need of organization, an example of what preparedness has and may accomplish, is shown in the assistance the National, State and County Medical Societies have rendered the Government in the enrollment for the Medical Reserve Corps of the Army and Navy and will render in the new call for 5000 more Medical Officers. This alone has demonstrated the wisdom of the plan and the privilege of rendering such service at this time of the country's great peril is sufficient reward for all the thought and labor expended throughout these many years.

State Medical Journals have probably suffered in the same degree. Our own *Journal* has, fortunately, however, to date at least, been able to retain the services of its most efficient secretary-editor. I cannot refrain from expressing to him our sincerest appreciation for the excellent manner in which it has been conducted under these trying times, both in its professional, editorial and business departments. To my mind it is the best edited State Medical Journal in the United States.

#### THE WORK OF RECONSTRUCTION AND REHABILITATION.

Profound as will have been the influence of the war upon the social and political life of all nations, none less will it be upon medicine and surgery and it behooves us all much to keep active our medical organizations that we may keep abreast of the advances inculcated in those who will have enjoyed the privilege of service. Thousands of young men will have experienced the benefit of the service of highly

trained medical officers, well equipped hospitals and trained nurses and will demand upon their return as high a degree of efficiency in their medical service. Already a few thousands of the sick and wounded have been returned and to these will be added thousands who are maimed and must be rehabilitated, and to these hospitals of reconstruction and rehabilitation, soon to be created and organized, must our most expert skill be directed. For this reconstruction, re-education and rehabilitation of our soldiers will lead to the reconstruction and rehabilitation in so far as possible of all disabled men, women and children that, after such devastations as are now being witnessed, the races may not perish from the earth. Thus the greatest problem of the age, the conservation of human energy, is unfolding itself.

The cry for service, as you see, is heard from every side. The place for the idler is not to be found. So, unconscious of sacrifice, provident of our strength, unremitting in our zeal, let us reaffirm our faith in a new pledge of service, that the fires at home may be kept burning to the glory of the profession and the liberty of mankind!

#### MEDICAL WORK IN CAMP CUSTER.\*

LT. COL. C. J. BARTLETT,  
Division Surgeon.  
CAMP CUSTER, MICH.

Mr. Chairman, Ladies and Gentlemen:

When, a few months ago, it was suggested to me a day at Camp Custer as a part of the program for your annual meeting, the possibilities contained in this idea immediately sprang into my mind, and it occurred to me that this contact between the civilian Medical profession and their confreres in the military service could not fail to be of immense benefit to both, and above all, would result in incalculable *value* to our nation in this her hour of labor during the birth of her new army.

Where, but to the Medical profession should a nation, as does an individual, turn for *aid and advice* in such a crisis? Who better fitted than the medical profession to ward off the ills of infancy, the effects of the *indiscretions* of childhood and adolescence, and to safeguard the strength of *maturity*? Our nation demands her children for her own uses. She does more than this; she demands that they shall come to her service with *vigorous* bodies and *active* minds,

\*Address delivered at 53d Annual Meeting M.S.M.S., Battle Creek, May 8, 1918.

and that this vigor and activity not only remain unimpaired but that it shall *progressively* increase so that when she has finally gathered her sons around her and sent them forth, they shall *advance*, a resolute and unconquerable phalanx.

In bringing forth and developing such an army, the first requisite is the proper *selection* of men. A stream will flow no higher than its source, and defective men are limited in their development by their *defects*. Soldiers are habitual bearers of burdens, are subject to terrific mental and physical *strain* and it is in consequence of these facts that many men who pursue their daily civil occupations in *apparent* good health, and generally along the lines of least resistance, are found, when subjected to the rigorous physical tests of the Army, *unsuited* for its uses.

It is in the selection of men, therefore, that the civilian doctor makes his first contact with the Army, and those of you who have been members of *Local Boards* must have been astonished and shocked when *one-fifth* of the men forwarded to Camp Custer in the first draft as *fit* for military service were returned by the military authorities as *below standard*.

It has been said and repeated many times that these examinations were conducted in Camp by officers of the *Regular Army Medical Corps* who had *exaggerated* and inflexible ideas as to what should be the minimum physical requirements exacted.

Let us *pause* for a moment and consider this statement. The Regular Army Medical Corps is comparatively very small and of its strength more than half is composed of men who have recently joined its ranks leaving its *experienced* men very widely diffused. In our *own* Camp there were none doing actual examining. The examiners were men of the Reserve Corps of only a very few months service in the Army. Their habits of thought and experience were *yours*. At the conclusion of the examination of the first increment of the first draft it appeared that *less* than 5 per cent. of rejections would be found. *Then* it was that realization gradually came to all that the standards for physical requirements for the Army and for civilian occupations were vastly different. When men with weak or defective arches were unable to stand a march of ten miles over country roads; when men with mild organic heart disease became cyanosed during *ordinary* setting up exercises or the more strenuous bayonet exercises; when the restriction of a uni-

form shirt caused extreme *dyspnoea* in a case of moderate or slight goitre in the course of every day military training; when men fell out from the ranks and reported to their *doctors* for these and similar imperfections, *then* the *conviction* was brought home to our doctors that these men, whom they had *accepted*, were being harmed and *not* benefited by their physical training and were a *liability* and not an *asset* to their organizations. And so it came to pass that they began a *weeding out process* among those whom they had previously accepted and became more and more *critical* of the material submitted for examination. Their judgment and action in this matter has been hastened materially by *pressure*, not from the Medical Department, but from the *line* of the Army. The Captain of a company wants no defectives in his ranks who will fall out at a drill or on the march and who lower the *average efficiency* of his organization. The Colonel of the Regiment will not stand idly by and see the training of his regiment delayed and its efficiency *impaired* because of physical deficiencies in his men. And so it has come about quite naturally that the official standard requirements for recruits are substantially the minimum which our Regimental Surgeons would *insist* upon if they had no official guide. As this process in the training of our medical examiners has progressed, so have we found a corresponding, yet slower response, on the part of *local board examiners*. Necessarily is this response slower for it is based upon printed instructions and the return of men from Camp and not upon *practical experience*.

To-morrow, you will have the opportunity of observing the development of physique which has taken place among your townsmen after a few months of military training and *regular living*. We will demonstrate, also, in an imperfect manner, the methods by which we care for our sick in Camp and the provisions made for the rapid evacuation and treatment of our wounded when the time comes to put to a practical use our training in Camp.

Unfortunately, our examinations for the *last draft* are about completed for I would have liked the opportunity of showing you our methods of examining from a *thousand to fourteen hundred* recruits per day. This examination includes not only the routine examination to which each man is subjected, but also the examination by tuberculosis, orthopedic, psychiatrists and psychological specialists which each man undergoes. By the latter, men are



graded according to intelligence and this is a valued aid in the selection of men for non commissioned officers.

I have said that the *first* point of contact between the medical men out of the service and the Army was in the selection of recruits. This, from its nature, is a temporary contact. There is, however, or should be, a permanent contact, indirect perhaps, but of immense possibilities both to the Army and to civil communities. I speak of *sanitation* of communities in general and the control of communicable diseases in those communities in particular. Camp Custer is indeed fortunate to be located in a state which has evidenced in such a high degree through its authorized channels, the State Board of Health, that intelligent spirit of co-operation without which many of our efforts would be nullified and without which Camp Custer would never have taken and maintained its proud position among the most healthful Camps of the National Army.

But it is exactly in the *eradication* of the common communicable diseases, the diseases best known as *children's* diseases, that we come to you for assistance. The best regulations in the world are of no avail unless the individual doctor who sees the case works with *heart* and *brain* not only to cure his patient but to *prevent* the spread of the infection. As your civilian youths are constantly discarding their accustomed clothing and donning the uniform of a soldier, as our soldiers are constantly going back to their former homes, or to the homes of their friends in civil communities, so there is a continuous stream of these infections being brought into our Camp and perhaps a stream carried back to your communities by a reverse current.

Inasmuch as our soldiers are quartered together in buildings which hold about a hundred and fifty men under conditions favoring the spread of such disease from man to man with the greatest ease, the control and elimination of these diseases becomes of magnified importance. As to control, we have been reasonably successful as measured by existing standards, but our goal is elimination and this we will never attain without your active and *unceasing* co-operation.

When we consider that a disease such as mumps, which is everywhere thought of such minor importance that little attention is paid to it, but which spreads with such unfailing rapidity and impartiality under our conditions in Camp as well as in your schools, was re-

sponsible last winter for taking from the ranks in training *upwards* of 270 men per day, then we come to a realization of the fact that we are not dealing with a trivial evil. If instead mumps we consider measles the completed picture may be appalling. We still have among us many mothers who needlessly expose their children to this infection in order that the children contract the disease and get it over with. Gentlemen, for twenty years an epidemic of measles among troops has had more terror for me than any other disease. It was *measles* with its attendant pneumonias and empyemas which caused such an astonishing and alarming death rate in some of our southern Camps as to force a Congressional investigation and serious anxiety in the Surgeon General's office. I am proud to state that we *seem* to have cracked this nut in Camp Custer so that our total cases are limited to a dozen, and for these we are entirely indebted to outside contagion.

I am aware that I am stating nothing new in touching upon these communicable diseases but I believe that in practice their control, or better still, their elimination is not given *sufficient* attention and leaves much to be desired. It is from your communities that fresh sources of infection are brought in continuously into our Camp, swelling our sick rates and diminishing the daily number of men under training and sometimes causing sorrow and mourning in your homes.

Camp Custer represents your state in the great American Army now forming. We have been striving to put it in first place among the National Army Cantonments in regard to its health rates. So far we have not succeeded in reaching higher than second place, although we have hopes. Camp Grant has held first place for many weeks past and we are after her *scalp*. But when it comes to a matter such as this we are discussing we don't lay too much stress on your climate nor on the superior resisting powers of your young men, nor do we believe in *luck*. To attain our goal, to put Camp Custer in first place and keep her there, the active co-operation of the entire state and particularly of its medical men is essential.

To-morrow, we have the honor and pleasure of welcoming you to *your* Camp. We hope that you will be entertained by what you see. But we hope for more than this. We hope that the inspiring sight of 30,000 soldiers training for their fight against the enemy will quicken your pulses, your imagination, your sense of *duty* and that many of you will remain to answer the

call and join our ranks and that those of you who cannot do this will bend their efforts to the solution of the great problem which I have outlined and thus aid in maintaining the physical vigor and well being of our Army and your civil communities.

### THE DIFFERENTIAL DIAGNOSIS OF STREPTOCOCCUS, STAPHYLOCOCCUS AND PNEUMOCOCCUS INFECTIONS FROM A CLINICAL STANDPOINT.\*

JAMES E. DAVIS, A.M., M.D.  
DETROIT, MICH.

The body's obvious changes in power of resistance contribute to or inhibit the invasion of bacteria and likewise virulence and numerical strength of attacking organisms are potent in overcoming resistance.

The bacterial organisms possess tissue selective power or certain tissues offer but a minor resistance to particular organisms as evidenced by pneumococi in relation to the respiratory tract, streptococci to lymphoid tissue and staphylococci to the cutaneous surfaces.

The diffusibility of streptococci is decidedly more marked than is that of staphylococci or pneumococci and localization is much more frequent in the staphylococcic infections.

There are some important outstanding features which must have frequent consideration in the practical problems relating to the infections. This is particularly true of the streptococci which may grow very well on almost any media and at any but extreme temperatures and in any one of many strains. Their mutative possibilities are perhaps many and often very confusing.

The virulence of the streptococcus varies with the strain, location of infection, condition of the tissues, the part of the body infected, and the presence of a symbiotic infection. The reaction usually is very severe and extensive and there is practically no picture of inflammation that cannot arise therefrom. The streptococci are the common cause of inflammatory tissue changes.

The tissue lesion exhibits a death of cells followed by an inflammation which is usually purulent. In contrast with staphylococci the streptococci are more easily eradicated but their presence is not so easily tolerated.

The pneumococcus, like the streptococcus,

grows on nearly any culture medium but its growth is not so extensive. Its selective site is the lung. Its distinctive pathology is essentially the formation of a fibrinous exudate. Wherever the pneumococcus infects the body it is characterized by the formation of fibrin, liquefaction of fibrin, absorption and resolution.

A striking differentiation is seen in the pneumococcic and streptococcic infections of the brain. The meningitis from the pneumococci exhibits a very heavy layer of fibrin over the base of the brain but in streptococcic infections there is a purulent exudate over the meninges.

In man, a large variety of pathological processes may be caused by streptococci depending upon whether the infection is definitely localized or generally distributed and upon the relationship existing between the virulence of the incitant and the resistance of the subject. The hematologic changes in pneumococcic infections may aid in making up the differential picture as in uncomplicated lobar pneumonia when leucocytosis develops early varying from 20,000 to 40,000 and following a true crisis there is a marked diminution. The differential count at this time shows frequently an eosinophilia. A severe infection however may show leukocytosis. There is no change ordinarily in red cells. In streptococcic or staphylococcic infections if severe the red cell count may be reduced to 300,000 in twenty-four hours with little or no change in the white cells. The hemoglobin is also diminished about as much as the red cells. Leucocytosis occurs only when the struggle between the patient and his disease is intense, and is of no prognostic indication.

Leucocytosis may promptly disappear when exudation ceases and suppuration involving mucous surfaces may induce very slight leucocytosis. Puerperal septicemia when either very severe or very mild may have no leucocytosis.

In erysipelas or scarlet fever the leucocyte count may be quite as high as in pneumonia or empyema for leucocytosis after all depends on the resultant of two forces, viz., the severity of the infection and resisting power of the individual.

Lobar pneumonia may show tenacious blood streaked sputum containing densely aggregated Gram positive diplococci, (probably pneumococci).

Evans states that the cytology of the exudate in pneumonia is predominately mononuclear in character.

It has been presumed that streptococcus in-

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fections for the most part required some injury of tissue or preceding infection to insure its successful invasion of the body. Its virulence, if the upper air passages, vagina or cervix afforded entrance, was assumed to be very light, (Ziegler).

It seems now well proven that in the great majority of instances lymphoid tissue of the throat is the place of most frequent growth of streptococci and from which general invasion usually proceeds.

The proof of infection may be searched for by the following tests:

1. Cultures of exudates from the joints and tissues about the joints.
2. Cultures from possible foci other than the joints, (as evidenced by clinical manifestations).
3. Blood-cultures for a bacteremia.
4. Blood tests for immune bodies, of which the complement fixation test against autogenous antigens and against exogenous antigens is the most appropriate. (Hastings).

Foci of infection may be located anywhere in the body. The usual foci however are: alveolar abscess, deep tonsillar or peri-tonsillar abscess and chronic sinusitis. Other but less frequent foci are: cholecystitis, acute or chronic appendicitis, submucous abscess anywhere, salpingitis, vesiculitis seminalis, prostatitis, etc.

Other sources of infection are: secondary foci in lymph-nodes proximal to the primary focus and to systemically infected joints, muscles, etc., "overdentistried" teeth, tonsillotomy stumps.

Histologic examination of joint structures, heart-valves, muscles and other tissues of inoculated animals shows embolic bacterial masses in the terminal arteries. Endothelial proliferation at the site of the embolus closes the vessel lumen. Muscle and joint-capsule show embolism, local hemorrhage and endothelial proliferation closing the lumen of the vessels. The same process takes place locally in the submucosa of the stomach and intestine and of the gall-bladder.

The specific streptococcus may invade vessels of the pancreas with resulting acute severe pancreatitis and glycosuria.

Susceptibility, resistance and immunity are relative terms and are subject to the determining factors from individual, racial or species peculiarities.

Rosenow has reported interesting transmutations of different strains of streptococci and also of streptococcus into pneumococcus and pneumococcus into streptococcus.

The clinical symptoms in the great sore

throat epidemics of this country have been similar. Intense hyperemia with or without a grayish exudate was the usual picture. Enlarged lymph-nodes occur with occasional suppuration. Extreme prostration and a tendency to relapse were emphasized by most observers. (Capps).

In the Boston, Baltimore and Chicago epidemics of streptococcus sore throat there was a striking similarity in the complications. Otitis media, peritonsillar abscess, erysipelas or other forms of skin eruptions and nephritis were common sequelae. Arthritis, endocarditis and myocarditis occurred in many cases. Pleurisy and pneumonia often ushered in a fatal septicemia. But the most dangerous and remarkable complications was peritonitis which was responsible for many deaths.

Cummings reports 7,056 cases of acute rhinitis, pharyngitis, tonsillitis and bronchitis among the students of the University of Michigan during 1913 to 1917. Of 1,342 cases of acute pharyngitis and tonsillitis staphylococci predominated but when 50 per cent. grain alcohol was used to mop off the surface of the tissue affected and the central lesions curetted lightly, 60 per cent. streptococcic cultures were obtained. A fairly constant finding was small lymphoid plaques on the post pharyngeal wall. In the center of the plaques vesicles containing clear, serosanguinous fluid or pus were observed.

#### PNEUMOCOCCUS.

Pneumococci grow best in neutral or slightly alkaline media. Slight acidity not exceeding 8/10 per cent. does not materially hamper development. When exposed to light they die within one hour. As yet strong soluble poisons have not been obtained from pneumococci, the most potent toxic products being in the nature of endotoxin and closely bound to the cell bodies. It is uncertain whether even a temporary immunity is acquired in pneumococcic infections. Dochez & Avery affirm that pneumonia is rarely an autogenous infection of the lungs.

Morphological variations occur in pneumococci and streptococci so that there are no constant cultural or pathogenic characteristics as yet to distinguish between these organisms. Pneumococci ferment inulin; streptococci do not.

There are some races of pneumococci and streptococci that are indistinguishable.

About 90 per cent. of all cases of lobar pneumonia are caused by the pneumococcus. (Netter). Lobar and other pneumonias are by no



means always caused by one and the same microorganism. Invasion of the respiratory organs by streptococci is not rare, and may lead to bronchitis, pneumonia, empyema or pericarditis. Secondary infections in pulmonary tuberculosis are frequently streptococcic.

Keyes injected an emulsion of pneumococci obtained five days previously from the heart blood of a man who had died of lobar pneumonia into the leg vein of pigeons and found that uniform distribution among the several organs was not obtained, but preferential deposition occurred in the liver and spleen and a much smaller number were found in the lung and bone marrow, and a still smaller number in the pancreas and intestine. In ten minutes after injection pneumococci were localized in the liver and spleen and after seventy-two hours both of these organs were free of the organisms which had been destroyed within fixed phagocytes.

Fraenkel and Reiche have described the changes in the kidneys from acute infectious diseases as transitory in character and due to toxins. The cortex is almost always exclusively affected and only in rare instances were the collecting tubules involved. In the cortex the secreting parenchyma, the loop of Henle, and the straight tubules alone were involved and the glomerular capsules contained variable amounts of exudate.

In twenty-two of the twenty-six cases studied by Mathers pneumococci were found in the kidney. It is entirely probable that the organisms could have been found in every case if the tissues had been examined at an earlier period in the disease. This same worker isolated pneumococci in the urine of 38.4 per cent. of twenty-six cases having lobar pneumonia. The time just before or just after the crisis yielded the organisms best. Pneumococci however do not grow in urine to any great extent, but the urine may be a source of infection. Urinary culture then may be of great value in the diagnosis of pneumococcal infections.

In the so-called la grippe epidemic at the University of Michigan, (1915-1916), the nasal and bronchial mucous membranes were attacked. In 1030 cases the nasal, bronchial and pharyngeal secretions were examined and the predominating organisms were pneumococci and various streptococci, the latter being present in 80 per cent. of the cases. (Cumplings).

#### STAPHYLOCOCCUS.

Sternberg has shown that staphylococci are resistant to heat for ten minutes up to 56 de-

grees and 58 degrees C and when in a completely dried state the resistance reaches 90 degrees or 100 degrees C. The tolerance to dessication is noteworthy, the organisms remaining alive for six to fourteen weeks upon paper or cloth.

Lower animals on the whole are less susceptible to staphylococcus than is man.

A balance of incitant and subject resistance obtains where there is temporary or permanent localization of the infective process. The causative bacteria thereof are pre-eminently the staphylococci.

Virulent staphylococci thrown into the venous blood usually lead to pyemia with secondary abscesses in the kidneys, heart and voluntary muscles.

If injury to bone has preceded intravenous infection by staphylococci, osteomyelitis is often a sequela.

Mechanical or chemical injury of heart valves preceding intravascular staphylococcus inoculation may result in localization leading to malignant endocarditis.

Spontaneous intradermal inoculation with staphylococcus is frequently observed in extending furunculosis.

Certain soluble toxins elaborated by the staphylococci and streptococci attack primarily the red blood corpuscles and hemolytic poisons can be removed from solutions by contact with red blood cells of a susceptible species just as centrifugated brain tissue will remove tetanus toxin.

Lesions following animal injections of staphylococcus are not confined so strikingly to the gall-bladder as in the case of the streptococcus. (Rosenow).

Mixed cultures from appendicitis produced lesions of the appendix in thirty of thirty-seven rabbits, of the stomach or duodenum in nine, and of the gall-bladder in four. Those from ulcer produced lesions of the stomach or duodenum in five of eight animals, of the gall bladder in one and of the appendix in none. (Rosenow).

#### STREPTOCOCCUS.

Hemolysis is a property common to a number of kinds of streptococci. The nonhemolytic races probably do not produce septic sore throat and are not dangerous to man. (Davis).

The hemolytic property is one characteristic for identification purposes of the human type strains from the many nonhemolytic and feebly hemolytic streptococci found in milk. (Davis).

Streptococcus, has, according to Marmorek,

a direct relationship between its virulence and hemolytic power.

Recovery from streptococcus infection does not to any marked degree produce immunity against these bacteria and organisms long resident in some focus in the body, such as the tonsils, may spontaneously and suddenly invade other tissues and set up new processes, which present clinical pictures entirely different from those produced before; organisms from these new lesions may cause similar lesions in animals.

The usual pathological picture from streptococcal infection is as follows:

Usual primary focus: nose and throat particularly the tonsils.

Distribution: to specifically elected tissues.

Histologic changes: congestion, hemorrhage, infiltration, edema or fluid collection, hemolysis, collection of polymorphonuclear cells about the vessels, cocci agglutination, abscess, hemolysis organization.

Septic sore throat is generally more severe when milk borne than when spread in prosodemic fashion.

Aged persons with septic sore throat emphasize the symptoms of hyperpyrexia, prostration, relapses, rheumatism, erysipelas and nephritis while gland and ear involvement is more common among the young. When spread by contact, multiple cases in a household are less numerous than when it is spread by milk.

In the Westchester County outbreak 83 per cent. of the cases showed reddening of the throat, 60 per cent. tonsillar involvement, 50 per cent. glandular involvements, 47 per cent. prostration, 37 per cent. high temperature, (over 102 degrees), 20 per cent. false membrane, 11 per cent. rheumatism, 9 per cent. quinsy, 8 per cent. ear infection, 7 per cent. relapses, 3 per cent. nephritis, 2 per cent. erysipelas and .04 endocarditis.

The cultures of streptococci from dairy products when injected into animals produce (6%) ulcer of the stomach, (6%) cholecystitis, (28%) arthritis, (6%) endocarditis, (20%) myocarditis and (26%) myositis. (Rosenow and Dunlap).

Henrici has described lesions of the heart, aorta, kidneys and joints in twenty-four animals inoculated with large doses of streptococcus viridans from chronic alveolar abscesses in patients with systemic disease.

The septicemia occurring during the puerperium is most often caused by the streptococcus.

#### LYMPHADENOID TISSUE.

Streptococcal infection causes swelling, deep congestion and hemorrhage of lymphadenoid tissues. Middle ear, mastoid and sinus involvement followed the initial lesions in lymphoid tissue of vesicles containing serous or hemorrhagic fluid and pustules. (Cummings).

The injected, swollen tonsil and peritonsillar tissue with slight grayish exudate in the crypts or membrane covering the tonsils, pillars and pharyngeal wall gives marked constitutional disturbances and is frequently followed by arthritis, peritonitis and septicemia. (Cummings).

The fused, firm, indurated cervical glands with laryngeal or thyroid complications are streptococcal infections. (Cummings).

Canfield firmly contends that the majority of infectious diseases are contracted through the lymphoid tissues of the throat and nose.

#### MUSCLE.

Voluntary muscle involvement by streptococci is characterized by two types of lesions, viz., interstitial hemorrhages and scattered isolated necrotic fibers with usually no leucocytic infiltration, (indicating a condition due to circulating toxins rather than to a localization of the streptococci).

Billings says chronic myositis is clinically a specific indication of streptococcal infection and usually there is a selected group of muscles as the biceps humeri, the masseter, the erector spinae, the hamstring, quadriceps femoris and the anterior tibial group. The number of muscles involved in any one patient varies.

Billings has never seen a myositis in gonorrheal arthritis nor has he ever seen tenosynovitis in streptococcus chronic arthritis which is frequently present in gonorrheal arthritis.

#### JOINTS.

Streptococcal joint lesions may be produced with equal frequency by both hemolytic and nonhemolytic strains. Arthritis is a very frequent lesion from streptococcal organisms and the characteristic pathology shows pronounced congestion of the capsule, with hemorrhages frequently beneath the periosteum. A diagnosis is usually made about the time exudation within the joints occurs. This exudate usually consists of a thick, mucous, turbid fluid, the turbidity being due to polymorphonuclear leucocytes and develops most frequently in the knee joints, next in the elbows, in animal experimental work.

Streptococcal infections of extremities, such as a subungual infection of the finger or toe may give rise to a general invasion of the body with arthritis conforming clinically to a typical attack of acute rheumatic fever.

Billings studied seventy cases of arthritis deformans and found the infectious source is usually focal and located in the mouth, (alveoli), faucial tonsils or antra, (sinuses); occasionally the focus may be the prostate gland, seminal vesicles, female genitalia, appendix, gall bladder or a circumscribed infection anywhere. In all the streptococcus prevailed as the infective organism.

In (14) of (38) cases of arthritis deformans Rosenow found streptococci in the lymph glands draining involved joints.

In Cumming's series of 1600 cases of tonsillitis nephritis was observed in 1.8 per cent. of cases. Transient albuminuria was common. Appendicitis and peritonitis occurred twice, each case being fatal and of streptococcic origin.

#### HEART AND AORTA.

Streptococci have an elective organ affinity for the heart. Usually endocarditis develops by implantation on the surface of the valve and formation of fibrin exudate with leucocytes and masses of cocci, subendothelial hemorrhages, vegetations and abscesses occur, being developed by embolism.

Myocardial lesions from streptococci show circumscribed submiliary nodules, (Aschoff-Geipel bodies), in the intermuscular septa especially about the vessels. These nodules are composed of large oval or spindle shaped cells arranged about the vessels in rosettes or between muscle fibers in fusiform areas. The nodules may be more frequent near the endocardium especially at the bases of the valves.

The one common feature in streptococcal heart lesions in rabbits is their local nature. These foci are degenerative, exudative changes varying from slight infiltrations to well marked miliary abscesses.

The aorta has been shown by animal experimentation to be a specifically elective tissue in streptococcic infection.

#### GALL BLADDER.

Streptococci have been isolated from the walls of gall bladders and demonstrated there, in cases of chronic cholecystitis without stones. It would appear, therefore, that for the formation of gallstones two factors are usually necessary: (1) infection furnishing the nucleus

for the precipitation of bile salts, etc., and (2) a concentrated bile of high cholesterol content.

Rosenow found in human cholecystitis streptococci in the fluid content, in the nuclei of gall stones and in the gall bladder walls in more than half of forty-seven cases studied.

Streptococci were found by Rosenow in small numbers either in the stone or in the wall of the gall bladder in four cases in which the mucous membrane of the gall bladder presented the so-called strawberry appearance.

Acute streptococcic infection of the gall bladder produces hemorrhages and marked infiltration chiefly in the submucous and subperitoneal coat while in the chronic stages there is fibrosis and but little cellular infiltration. The streptococci are found in large numbers in the areas of hemorrhage and infiltration.

Elective affinity for the gall bladder was shown by sixteen strains of streptococci from cholecystitis as isolated. Most of these were isolated from the wall of the gall bladder; three from the centers of gallstones, and one from an adjacent lymph gland. (Rosenow).

Lesions following animal injections of staphylococcus are not confined so strikingly to the gall bladder as in the case of the streptococcus. (Rosenow).

The elective localization of the bacteria from the tonsils was tested by Rosenow in the cases of three patients with recurring attacks of cholecystitis. The cultures from two, one during an acute exacerbation, the other three days after cholecystectomy, were injected into two dogs and four rabbits. Both dogs and two of the rabbits developed striking lesions of the gall bladder; the rabbits showing lesions in the muscles in addition; the other two rabbits had ulcer of the stomach. (Rosenow).

#### APPENDIX.

The occurrence of appendicitis in epidemic form, its seasonal prevalence and its occurrence in several members of the same family have been noted repeatedly, (Mantle, Hood, Martin, Wahle, Haim and Rostonzew).

#### GOITER.

Rosenow has made cultures from deep tissues of many goiters removed surgically for hyperthyroidism and without exception he has been able to isolate and grow a streptobacillus.

#### OVARIAN TISSUES.

In fourteen of twenty-five cystic ovaries from patients, Rosenow found streptococci.



#### INTESTINE AND PERITONEUM.

Steinharder reports that the staphylococcus of proper virulence has an affinity for the intestinal tract, locating most often in the appendix and occasionally in the stomach.

#### EYE AND NERVOUS SYSTEM.

Panophthalmitis and iridocyclitis are observed after streptococcus and pneumococcus infections.

The clinical picture of streptococcic infection of the nervous system may be best characterized as an inability to keep still, constant movements of the head from side to side, a marked staggering gait with a very apparent inability to coordinate movements. Retraction of the neck may occur. The interpretation may be the so-called "rheumatic chorea."

The pathology of streptococcic infection of the nervous system is shown microscopically by congestion, occasional hemorrhages and cellular infiltration on the brain surface varying from a few lymphocytes to a diffuse thin layer over the entire brain surface of mononuclear and pus cells. Within the brain substance there is perivascular lymphocytic infiltration and minute foci of mononuclear cells not associated with vessels. The cerebellum and pons are affected as well as the cerebrum. The picture is one of encephal meningitis.

Rosenow and Oftedal have shown that streptococci have an elective affinity for the spinal root ganglion and are found in pure culture in the spinal fluid in cases of herpes zoster and are the cause of this disease.

Condat found pneumococcus abscesses in the brain by autopsy following acute meningitis. There were twelve abscesses in the brain and the patient had recently had a pneumonia in the right lung.

Worster-Drought and Kennedy report nine cases of pneumococcal meningitis, five of these cases being the so-called primary form (no active pneumococcal lesion could be found elsewhere). Two adults of this number however had catarrhal colds.

In the (4) cases occurring as secondary infections, two followed lobar pneumonia, one middle ear disease and one empyema of the sphenoidal sinus.

1229 David Whitney Bldg.

#### THE TECHNIC OF TAKING BLOOD PRESSURE.

WILLIAM R. VIS, B.S., M.D.  
DETROIT, MICH.

Technical skill in estimating blood pressure involves a knowledge not only of the technic of the test, but also of the indications for taking a reading. The physician should know in what types of cases a knowledge of blood pressure is valuable, when the test should be made, and how often repeated.

#### IN WHAT CASES SHOULD BLOOD PRESSURE BE TAKEN?

The importance of knowing the pressure becomes apparent when we view it for the moment from the standpoint of the specialist. We expect the up-to-date surgeon to make pressure readings before, during, and after every major operation. We feel that the obstetrician, the oculist, the neurologist, and the syphilologist can not afford to neglect blood pressure. How much more the internist treating hemorrhage, nephritis, goiter, or adrenal disease! *There is no disease that does not have some effect on blood pressure.* Therefore, every thorough examination should include a blood pressure estimation.

#### HOW OFTEN SHOULD PRESSURES BE ESTIMATED?

Blood pressure should be taken often enough to determine the mean pressure for the individual under consideration. *Blood pressures vary with every physiological function of the body.* Muscular action (1), digestion, mental exertion (2), excitement, and sleep (3) are potent factors. Less obvious influences are respiration (4), diurnal changes (3), skin reflexes, fatigue, and carbon-dioxide concentration in the blood (5).

Disease phenomena, even more than physiological, modify blood pressure. The readings must be frequent enough to trace the course of the pressure during the disease. Therefore, a single reading may not give the mean pressure, as any one of the many bodily functions may distort the reading, even if no pathological factor is present.

It seems axiomatic to say that more than one pressure estimation should be made. The first reading is recognizedly unreliable because usually the patient reacts to the novelty of the test. Several daily readings are ordinarily indicated. During profound disturbances very frequent readings may be desirable. This has

been found applicable in major surgical operations (6), in labor (7), in the crises of acute infections (8), and in cases of hemorrhage (9).

We should be guided by the nature of each case in judging when pressures should be taken and how often repeated.

#### METHODS OF ESTIMATING BLOOD PRESSURE.

For the practitioner it is difficult to estimate blood pressure without some form of sphygmomanometer. There are several points in the physical examination which also give some indication of the force of the arterial stream.

Palpation of the radial artery is useful especially if three fingers are employed. The vessel should be compressed by the proximal finger leaving two fingers to differentiate between the tension of the artery and the rigidity of the wall itself. Sclerosis or calcification of a vessel is not proof that high pressure exists. *We have found the ileac much more serviceable than the radial for a palpatory estimate of pressure.*

The heart also offers some aid in detecting high pressure. The left ventricle may be hypertrophied, the apex being displaced downward into the sixth intercostal space and outward beyond the midclavicular line. The powerful character of the apex impulse is suggestive as also a heavy mitral first sound. Enlargement of the ventricle is sometimes difficult of diagnosis but another cardiac sign of equal importance and ready recognition is accentuation of the aortic second sound. In hypertension cases it is often heard in the third right interspace rather than in the second, the heart being pushed down, supposedly, by the sclerosed aortic arch.

However, all of these means of estimating pressure are often inadequate. One of the proofs for this, to my mind, is the fact that the importance of blood pressure remained generally unrecognized until the sphygmomanometer was available. *The practitioner who claims that he can accurately judge the blood pressure by palpation shows by that statement that he does not use an instrument and is not aware of his own limitations.* Anyone who checks up palpatory readings with an instrument soon realizes the inaccuracy of the more primitive method.

#### THE INSTRUMENT OF CHOICE.

There are three main types of instruments, the oscillometer, the mercury sphygmomanometer, and the aneroid.

For accurate measurements a mercury mano-

meter is preferable to a spring or aneroid. The aneroid is readily portable and for the average physician is the instrument of choice. The oscillometer is too complicated to be of much use in practice.

Aneroids deteriorate, however, and should occasionally be checked with a mercury column. Where a mercury sphygmomanometer is available this is a simple procedure. Attach the aneroid with its pump to the mercury tube leaving out the rubber bags entirely. Then drive the mercury column upward with the pump and compare the readings on the two scales.

The type of rubber bag and cuff is of less importance. The standard bag is about 12 cm. wide and 30 cm. long. The cuff should be firm and large enough to encircle the limb easily.

#### ADJUSTMENT OF THE INSTRUMENT TO THE LIMB.

Many experiments have shown that it is better not to include clothing within the cuff for accurate measurements of pressure (10). A thin sleeve may be left about the arm to avoid the disturbance that cold would cause in pressure relations. Rolling a thick sleeve up to the shoulder is not satisfactory as it interferes with the application of the cuff and may press upon the vessels, especially the veins. Any interference with the venous return of blood tends to raise the arterial pressure.

One should not place the cuff tightly about the arm. In hypotension the pulse may be obliterated simply by a too tight adjustment of the cuff. This is especially applicable also in children.

*It is important to remember that all reflexes alter blood pressure.* The rubber bag should not be too cold. Unnecessary roughness should be eliminated and the pain incident to the compression of the limb should be minimized. Gentleness and skill on the part of the physician will tend to allay any apprehension or nervousness on the part of the patient.

#### SITE OF ESTIMATION OF PRESSURE.

Blood pressure has usually been taken in the arm, with the understanding that there was but little variance throughout the large arterial system. A review of the literature is anything but convincing on this point. Leonard Hill (11) has described a higher femoral pressure in aortic insufficiency and Heitz (12) cites many cases other than aortic where there

is a marked discrepancy in favor of the leg pressure. *In some of our cases the femoral systolic pressure was one hundred millimeters higher than the brachial reading*, with a smaller difference in diastolic pressures. A discrepancy occurred in a great variety of conditions showing that it is not peculiar to aortic regurgitation.

Experimenters have recorded the pressures in the radial and tibial arteries (12). But these probably add little to the sum total of our clinical knowledge of blood pressure.

#### COMBINED PALPATORY AND AUSCULTATORY METHOD.

The author's technic for arm pressures is as follows:

The instrument is adjusted above the elbow, leaving the hollow of the elbow free for the application of the stethoscope. Before inflating the rubber bag one hand is placed on the radial artery at the wrist and the pulse is felt. With this hand ready to detect pulse changes the rubber bag is inflated until the pulse is no longer felt at the wrist. The mercury will now record a pressure slightly above the systolic pressure, so it should be gradually allowed to fall until the pulse reappears at the wrist. This point marks the palpatory systolic pressure and a reading should be made and mentally noted. The wrist is now released and with the free hand the stethoscope is applied over the bifurcation of the brachial artery. As soon as the sounds are clearly heard the pressure should be raised with the pump until all the sounds are no longer heard. Then the mercury is again allowed to fall gradually. The first sound heard with the stethoscope indicates the auscultatory systolic pressure. As the pressure continues to drop a series of sounds is noted. When the clear sounds give way to a softer sound the diastolic reading should be made. But the faint sounds may continue for a few millimeters or even down to zero.

This method has many advantages. The bag is inflated only just enough to make the readings and the patient is not subjected to a higher pressure on the arm than is necessary. The complete inflation of the bag need be done only once though all the readings are taken twice. The conservation of time is important as any extended manipulation is likely to dis-

tort the blood pressure relations. And, most important, this method gives a comparative record of the palpatory and auscultatory readings.

In the blood pressure estimations in the femoral artery the technic varies somewhat. The bag and cuff are applied so as to compress the vessels under the posteromesial surface of the thigh just above the knee. If the cuff requires additional support a roller bandage may be utilized to hold it firmly in place. The palpatory reading is first made in the popliteal space but it is not always possible to feel the artery or even to detect any pulse. The stethoscope is then applied in the same area for the auscultatory readings. The patient should lie perfectly flat in a comfortable position (13).

#### THE KOROTKOFF SOUNDS.

A large artery under pressure gives rise to rhythmical sounds synchronous with the pulse beat. This may often be noted when the stethoscope is placed over the subclavian or carotid arteries with slight pressure. When the sphygmomanometer cuff is applied to the limb similar sounds may be elicited. These were well described by Korotkoff and constitute the principal criteria in blood pressure estimation by auscultation.

When the pressure in the cuff is raised so as to exceed the pressure required to close the vessel completely no sound is heard over the vessel distal to the compression. Then by gradually lessening the pressure a series of sounds is produced which is practically uniform in all normal cases.

The first sound is a faint tap which comes and goes with the respiratory waves (4) and with the Traube-Herring vasomotor waves. If the heart beat is irregular in force some beats may cause sound while others are not heard. This sound occurs in the first phase when no blood comes through under the cuff and it is probably due to the dilatation of the upper segment of the compressed vessel (14), which sets the rubber bag into vibration.

In the second phase the blood spurts through with each heart beat as the pressure in the cuff is slightly lowered. The sound heard at the elbow is therefore of a murmurish quality, a thump combined with a murmur.

The third phase is the most important. The



sound is now a sharp thud which increases in loudness and clearness to a maximum and then fades sharply. This transition from loud to soft marks the diastolic pressure.

The fainter sounds constitute the fourth phase. It may include only a few faint sounds which rapidly diminish in intensity until nothing more is heard or it may continue over a longer period which occasionally persists until the mercury drops to zero. The sounds of the fourth phase are also accompanied by a murmur.

The fifth phase offers no sound of any kind. In one sense it is a negative quantity. But in a general sense we include in the fifth phase that part of the process which takes place between the cessation of the sounds and the descent of the mercury to zero. When the fourth phase persists to zero, there is no fifth phase. I have seen such a phenomenon in shock and in anemia, and in the leg it is probably of much more frequent occurrence. The question arises whether the persistence of the sound may not be due to the pressure of the stethoscope of the observer rather than to the pressure of the cuff.

We have, then, five phases, as judged by the Korotkoff sounds. In the first a sharp tap is heard, in the second a murmurish thump, in the third a clear thump which grows progressively louder, and in the fourth the murmur appears again. The murmur in the second phase is explained by the partial collapse of the artery during systole, and the murmur in the fourth phase may result from the partial collapse during diastole. The systolic pressure is read at the first sound and the diastolic where the loud third phase gives way to fainter sounds of the fourth. It has been claimed that the length of the third phase is proportional to the strength of the heart. In exceptional cases the second phase is absent or so faint as to be overlooked (15). This may lead to serious error in estimating the systolic pressure, pulse pressure, and so forth.

*The Toxicity of Arsphenamin (Salvarsan).*—James C. Sargent, Milwaukee, Wis., and J. D. Willis, Roanoke, Va., report untoward effects from the intravenous administration of American-made salvarsan (arsphenamin). Such experiences are not unusual, but should be reported. Untoward results followed the use of the German salvarsan. Such reactions may be due to faulty preparation, to de-

#### CONCLUSION.

There are within reach of every practitioner and clinician the means of estimating the systolic and diastolic blood pressures in the brachial artery. And from these the pulse pressure ratio and heart load may easily be calculated. It behooves us to make use of these means in every case that requires a general examination, in the interest of scientific medicine and in justice to our patients.

Also, as the leg pressures sometimes differ widely from those in the arm, I commend this phase of blood pressure to you for your further consideration.

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terioration of certain ampules of a batch, to idiosyncrasy of the patient or to faulty technic or preparation or injection. There is no reason to believe that the arsphenamin made in this country is more toxic or less satisfactory than that formerly imported from abroad. (*Jour. A.M.A.*, April 27, 1918, p. 1254).

## Minutes of the Fifty-third Annual Meeting of the Michigan State Medical Society at Battle Creek, May 7, 8 and 9, 1918

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### THE COUNCIL.

The annual meeting of The Council was called to order in the Ordinary of the Post Tavern in Battle Creek at 5:30 P. M., May 7, 1918.

In the absence of the Chairman, W. T. Dodge, who was on duty at Camp Sherman, Chillicothe, O., Vice-Chairman, W. J. Kay, presided. The following were present: Kay, Witter, Church, Buckland, Kiefer, Rockwell, Southworth, Hume, Seeley, President Biddle and the Secretary, F. C. Warnshuis.

The Annual Report of the Council (see minutes of the House of Delegates) was discussed. On motion of Councilor Hume, supported by Councilor Kiefer, the report was approved.

On motion of Councilor Seeley, supported by Councilor Witter, the following resolution was recommended for presentation to the House of Delegates. (See minutes of the House of Delegates).

Moved by Councilor Hume, supported by Councilor Rockwell, that \$100 be appropriated for the expenses of the War Committee. Carried.

A communication from the Council on Education of the A.M.A. requesting the appointment of a State Committee on Hospital Survey was referred to the Chairman for report at the Thursday meeting of the Council.

Councilor Kiefer, supported by Councilor Church, moved that the following men be recommended to the House of Delegates for election to Honorary Membership:

General Buno, Chief Surgeon Royal Italian Armies, Trevisio, Italy.

Col. Guidea Salvi, Udine, Italy.

Major E. Pazzi, Rome, Italy.

Colonel Hugard, Dijon, France.

Carried.

Moved by Councilor Hume, supported by Councilor Buckland that the Patriotic Fund be returned to the County Societies contributing to the fund. Carried.

Moved by Councilor Hume, supported by several, that a telegram of greeting be sent to Chairman Dodge. Carried and the Secretary did send such telegram.

Session adjourned.

### SECOND SESSION.

No business having been referred to the Council by the House of Delegates the second session of the Council did not convene.

### THIRD SESSION.

The Third Session of the Council was called to order in the Mess Barrack at Camp Custer.

The Secretary introduced the following newly elected Councilors: Jackson, Holdsworth and Toles.

On motion of Councilor DuBois, supported by Councilor Southworth, the Chairman was authorized to appoint a Committee of Three on Hospitals as requested by the Council on Education of the A.M.A. Carried.

On motion of Councilor Southworth, supported by Councilor Church, the officers of the Council and Dr. Reuben Peterson were authorized to determine a plan of activity for the War Committee of the State Society.

The Council tendered a rising vote of thanks to Lt. Col. C. J. Bartlett for the courtesies extended at Camp Custer to the Society.

A vote of thanks and an expression of appreciation was tendered to the retiring Councilors.

On motion of Councilor Southworth, supported by Councilor Seeley, Councilor Kay was elected Chairman of the Council for the ensuing year.

On motion of Councilor Southworth, supported by Councilor Seeley, Councilor W. J. DuBois was elected Vice-Chairman of the Council.

There being no further business the Council adjourned to meet in Detroit in January. The date to be selected by the Chairman.

W. J. KAY, Chairman.

F. C. WARNSHUIS, Secretary.

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### HOUSE OF DELEGATES.

The House of Delegates of the 53d Annual Meeting of the Michigan State Medical Society was called to order in the Post Tavern, Battle

Creek, at 7:45 P. M., May 7, 1918, with President Biddle presiding.

On roll call it was found that a majority of delegates registered were present and thus a quorum as provided by our By-Laws was present.

The minutes of the last meeting as published in *The Journal* were approved.

#### ANNUAL REPORT OF THE COUNCIL.

The annual report of the Council was presented by Vice-Chairman Kay, as follows:

In submitting the annual report of its stewardship to the House of Delegates the Council calls attention to the difficulties met with on previous occasions of National stress in maintaining Medical Society Organizations.

The Michigan State Medical Society was organized subsequent to the great Civil War, and a few years ago several of its founders at our anniversary meeting described the lack of organization existing in the Michigan profession at that time.

It has already become apparent that the present World Conflict in which we are engaged may seriously effect our organization. Many of our members have already entered the army, many more will do so, and as the Home Guard becomes smaller it will be more and more difficult to secure regular meetings of our County Societies and of the parent organization. In fact, it was deemed expedient last year to abandon the annual State meeting.

During the winter it became evident to many of us that if we weakly yield to these difficulties our organization may not survive the war. We have come to feel that the war is but an additional reason why those of us at home should keep the fires of scientific interest burning; why we should meet as often as possible for interchange of ideas and for the maintenance of professional co-operation and enthusiasm. In this way we can best do our part in keeping the Michigan Medical profession active and energetic in the performance of its duty to our country.

A reference to our Secretary's report published in the March *Journal* disclosed that so far our membership has not suffered, and our finances have been kept in fine condition. In fact, we have made a net gain in membership in 1917 of eighteen, and a net profit of \$1,969.84.

The Council wishes it understood by the members that our Secretary is entitled to much of the credit for this favorable showing. His untiring energy and ability in securing advertising contracts is responsible for the financial success, and the County secretaries are together deserving of credit for maintaining the membership.

Further reference to the report shows that the cost of publishing our *Journal* has enormously increased during the last five years. In 1912 the *Journal* cost was \$3,821.90. In 1917 it was \$5,756.92. In 1912 the advertising sales were \$1,851.92 and in 1917 they were \$3,742.66. Our net worth has increased from \$4,597.73 in 1912 to \$10,025.00 in 1917.

These figures are eloquent testimonials of the business ability of our Secretary.

#### PATRIOTIC FUND.

The special meeting of this society in May, 1917, provided for an assessment of five dollars per member to create a patriotic fund to be used in assisting the families who might be in need on account of our members' admission to the Medical Officers' Reserve Corps. The control of the fund was left to the Council, and by the Council to its officers without providing regulations to govern them in its expenditure. Our constituent County Societies responded very reluctantly to the requests for the collection of this fund. A few paid, more gave the request no attention, and there are a few who refused altogether. \$3,155.00 was paid in, of which \$960.00 was from Wayne County. It soon became apparent that the attempt to create this fund as the State Society Enterprise was doomed to meet with defeat. Further consideration led to the conclusion that the special meeting in May, 1917, had been afflicted to some degree with War Hysteria, and with consequent over-anxiety concerning the families of our members who were to enter the Army Medical Service. This conclusion was confirmed when the applications began to come in for the allowances from this fund. The first was from an unmarried member without dependents who desired a donation from the fund for the purpose of paying for Life Insurance. Other applications were of a like nature, and all met with the approval of the officers of their County Societies.

Your officers did not feel like assuming the responsibility of adjusting these claims, consequently the Chairman called a special meeting of the Council in Grand Rapids early in November, 1917. When the Council came together it had become evident that this plan of affording relief did not meet with the approval of our constituent societies. All of the larger societies had provided local funds through comparatively large assessments upon their members to cover this field of endeavor. It was evident that difficult problems were to be solved in disbursing such a fund by a central State Society authority. The Council therefore concluded that the County Societies afforded the proper medium for handling this matter and therefore adopted the following report of the Finance Committee:

"Your committee would recommend that the Patriotic Relief Funds be paid out only on recommendation of the Patriotic Committee of the County Society to which the applicant belongs. Further, that the aggregate of such payments shall not exceed the amount of money already contributed to the State Patriotic Fund by the County Society from which the request emanates."

#### REMISSION OF DUES.

The Council further considered the subject of remission of dues for our members while in active military service. It was considered desirable that not only the dues but the *Journal* subscriptions as well should be remitted. It was found impracticable for the State Society to remit the *Journal* subscription on account of the postal regulations; only paid subscriptions may be counted as part of the sub-



scription list, and only paid subscribers can receive the *Journal* on second class postal rates. Rebate of subscriptions therefore, would result in the decrease of the size of our subscription list, and consequently a reduction of advertising rates, and would entail prohibitive postage expenditure in sending the *Journal* to members in military service. It was therefore provided that all dues to members in active military service should be remitted, and the several County Societies were asked to pay the *Journal* subscriptions of such members by adoption of the following recommendation of the Finance Committee:

"We further recommend remission of the Defense and Membership dues of each member in active service and that County Societies remit the *Journal* subscription of \$1.50 for each member in active service in order that the *Journal* may be sent to him and so keep that member in touch with the organizational work that is being pursued. It is understood that all members whose dues shall be so remitted shall retain all the privileges and benefits of membership and protection of the Medico-Legal Defense Committee of this Society, and be considered as being members in good standing."

#### MEDICAL PROTECTIVE INSURANCE.

During the past year various insurance companies have been aggressively active in their solicitation of physicians. Many claims of superiority have been set forth and aspersions have been cast upon competing companies. The Council feels that the excellent work of our Medico-Legal Committee merit our heartiest approval and appreciation and we desire to draw attention to the untiring efforts of the Chairman of our Medico-Legal Committee. We indeed owe him a debt of gratitude.

Your Council feels that our members are entitled to a frank statement revealing the comparative value of the protection afforded by insurance companies.

Your Council also has received inquiries as to the advisability of this Society assuming and providing indemnity protection in addition to defense.

In order that definite information may be secured upon this feature, that we may have a true analysis of the legal coverage conferred in policies sold by insurance companies, and to the end that this question of Medico-Legal protection may be elucidated in the minds of our members, we recommend that the House of Delegates appoint a Committee of five composed of the Chairman of our Medico-Legal committee, Secretary-Editor, and three members of the House of Delegates appointed by the President. This committee to fully investigate the subject of medical insurance in its every phase and report to the Council at its January, 1919, meeting.

#### DEATH OF COUNCILOR B. H. MCMULLEN.

It is with feelings of sadness that we report the death of one of our pioneer Councilors, B. H. McMullen of the Ninth District, elected in 1902 when the first Board of Councilors was chosen. He has served continually since and for many years past has acted as Chairman of the Finance Committee. His last work for the Society was to participate in the Special Meeting of the Council last November, and to prepare the reports of the Finance Committee referred to in this report, and at that time

he appeared to be in good health and in excellent spirits.

He had a feeling of distress in his jaw and went to the Mayo Clinic where it was diagnosed as cancerous and an operation performed. The diagnosis of cancer not being confirmed, and his strength continuing to fail he went to Minneapolis where a diagnosis of leukemia was made. He failed rapidly and passed away on April first. The funeral was held at Cadillac on April fourth and by the request of President Biddle the State Society was officially represented by the Chairman of the Council.

The burial service were conducted by the Masonic Order with his long time friend and Brother Councilor, Hume, presiding as Past Grand Master.

The State Society has lost a faithful member, one always at the front in any work tending to add to the efficiency and honor of the Medical Profession. His associates in the Council feel that they have not only lost a faithful co-worker but a very dear friend.

Respectfully submitted,

W. T. DODGE, Chairman.

The Council recommends that the following resolution be adopted:

Whereas: There has been transmitted to this Society by our parent organization the A.M.A., the request of the Surgeon-General of the U. S. Army for assistance in securing the necessary medical officers for our military forces and the organizational resources of this Society are thus drafted into the work.

Therefore, we the House of Delegates of the Michigan State Medical Society do hereby

Resolve: That we recognize the responsibility that is thus placed upon us and do hereby pledge and tender to the A.M.A. War Committee and through them to the Surgeon-General our patriotic enlistment in the work and our assurance that we cheerfully accept the duty that has been detailed to us.

Further: That we hereby convey the assurance that this organization will expend its organizational and personal powers and energy to a successful consummation of the work detailed to this Society.

Further: That we assume the obligation of filling such quotas for medical officers as may be allotted to Michigan and will ever stand ready to do our uttermost to maintain the requisite personnel and efficiency of our military forces.

Further: That we hold fast with fervid loyalty and subscribe our all to the one end—the defeat and defacement of our enemies. We recognize that as loyal citizens we cannot do otherwise.

Lastly be it resolved: That we urge our component societies and individual members to give serious thought to the obligation they owe to their country and flag and that they subscribe their devotion by assuming the personal obligation that rests upon them, so that the reputation of the profession of this great state may ever be placed beyond criticism or reproach and its patriotism remain unimpeached.

The Council recommends the election to honorary membership of the men mentioned in the following letter:

U. S. Base Hospital, No. 17, France.

April 6, 1918.

Dr. Andrew P. Biddle, David Whitney Bldg.,  
Detroit, Michigan.

Dear Doctor:

In understand that the State Medical Society holds its meeting in Battle Creek on May 7. I think it would be advisable to make the following military surgeons of Italy and France, members of our State Medical Society. These men are all very prominent, and it just so happens that their courtesies were extended to the men of Michigan and Detroit, and I think it would be appropriate to recognize them. Namely:

General Buono, Chief Surgeon, Royal Italian Armies, Treviso, Italy.

Colonel Guidea Salvi, Italian Army, Udine, Italy.

Major E. Pazzi, 2nd Italian Army, Rome, Italy.

Colonel Hugard, Hospital General, Dijon, France.

Capt. James W. Inches has met the Italian Officers personally, as he was a member of the Italian commission.

Colonel Hugard is a surgeon in the French army, and has charge of all the Medical affairs in this sector. He has been extremely courteous to us, and has assisted us greatly in organizing our Sanitary Service here.

Trusting that the Society may see fit to confer this honor upon these men, I am,

Yours truly,

ANGUS McLEAN,

Director, Base Hosp. 17, France.

The following Committees submitted annual reports:

#### COMMITTEE ON VENEREAL PROPHYLAXIS.

Having taken full cognizance of the increased importance of the venereal question arising out of the state of war, in which we find ourselves, and of the influences of venereal disease on the efficiency of the soldiers, as well as of the more remote effect of dissemination, this committee wishes to express its unqualified approval of the measures taken by the Federal Government, both educational, restrictive, and preventive, as well as a most favorable recognition of the measures taken by the State of Michigan in enforcing the Law requiring the report of all cases of venereal disease, connoting the report of the sources of infection, wherever possible or practicable. In this regard we agree, as has been suggested, that the limitation of the spread of venereal disease would be most materially aided by the assistance of patients with limited means through the medium of free treatment by means of dispensaries and isolation hospitals, and by a general educational campaign enlisting the co-operation of the civil authorities and population.

We respectfully recommend that:

1. Especial emphasis, in the educational side, be laid on the issuance by the State Board of Health of pamphlets to be given to venereal patients;
2. That regulations be made by the State Board of Health in defining, as succinctly as practicable,

the evidence necessary to a diagnosis of gonorrhea or syphilis; what constitutes a cure within the meaning of the regulations of the Board?;

3. A provision of regulations governing a follow-up system, to be compulsory with the physicians to insure the Board that patients remain under treatment until discharged;

4. A plea to the State Legislature for funds in sufficient amount to carry on this work without embarrassment;

5. That official recognition be made by the State Medical Society of the work done by the Federal Government and the State Board of Health;

Lastly, with due regard to all possible arguments pro and con, we appeal to all members of the State Medical Society to assist in every possible way, the work of controlling venereal disease, by reporting all cases.

W. J. WILE,  
H. W. PLAGGEMEYER,  
ARTHUR E. WEST.  
Committee.

#### COMMITTEE ON LEGISLATION AND PUBLIC POLICY.

Your Committee on Legislation and Public Policy would respectfully report of its activities during the past two years as follows:

During the Legislation session of 1916-17, a determined effort was made to secure certain amendments, or more properly speaking, crippling of, our medical practice laws providing for a State board of drugless healers (so called) and licensing of such practitioners. The Committees on Public Health of Senate and House, in joint session accorded to all concerned a most courteous and patient hearing, at which session your Committee appeared and made argument. We endeavored to show that the educational standards fixed by our present laws were not only conservative, but that any material changes would jeopardize the physical well being of the people. Inasmuch as no further consideration seems to have been given the proposed measures, it is fair to presume that "Safety First" has a strong hold on our intelligent legislators.

Your Committee was informed by the leaders of Chiropractic that the attack will be renewed at each succeeding Legislative session until successful, and already, some enemy periscopes are showing off shore. Michigan has one of the best, and when well administered, one of the fairest and most efficient medical practice laws in the country. If this is to be maintained eternal vigilance must be practiced.

During the past two years your Committee has pursued its former policy of the co-operating with the State Board of Registration in prosecuting and eliminating from the field illegal and incompetent practitioners. Material gains have been made, and though we may not expect complete success in the near future, it is fair to say that the

morale and efficiency standards of the body medical are steadily and surely becoming better.

ARTHUR M. HUME,  
HENRY S. BARTHOLOMEW,  
BEVERLY D. HARISON.

Committee.

#### COMMITTEE ON PUBLIC HEALTH.

In compliance with the requirements of the Society we have the honor to herewith present the report of the Committee on Public Health Education, for the period September, 1916, to May, 1918.

Since the last regular meeting of the Society our Country has been forced to declare war against Germany and her allies, and the huge task of creating a large army and a correspondingly adequate medical corps has been undertaken and is rapidly nearing completion. Thousands of medical men from civil life have been commissioned in the Medical Reserve Corps and sent to the various training camps and from there to the scene of conflict. Boards of Health throughout the country have awakened to the necessity of making extraordinary efforts to guard the health of their respective communities and send only clean men to the service. It is safe to say that more publicity has been given to this subject, since the declaration of war than for many years previous, and the people at large undoubtedly are being educated in all public health matters, particularly the prevention of the dangerous communicable diseases, syphilis and gonorrhea. The great "black plague" is being driven from cover into the open where it can easily be bayoneted by the combined civil and military health forces. Nearly every doctor who serves in the U. S. Army and survives will return at the close of the war, to civil life, and it is safe to say, will be a potent factor in the education of the people in all that pertains to the conservation of human life.

The Tuberculosis Survey authorized by the Legislature of 1915, under the provisions of the "Murtha Bill," was terminated July 1, 1917. Much to the regret of all concerned the Legislature of 1917 refused to appropriate further funds for continuance of this very necessary educational campaign. Inasmuch as complete reports of the work done have been printed and furnished the public, no comment is required.

During your chairman's tenure of office as Secretary and Executive Officer of the State Board of Health, February 1914, to April, 1917, every possible means of educating the people in all that pertains to the prevention of disease, was utilized. The Board believing in the value of printer's ink gave the Secretary Carte Blanche, as a result the publications of the Board were enlarged and increased. The Monthly Bulletin "Public Health" grew from a circulation of about 7,500 to nearly 24,000, the pamphlets on the various communicable diseases were revised and increased in numbers, and sent to every school teacher in the State, and by them used in teaching the value of prevention

rather than curing of disease. Lectures with stereoptican and moving picture reels added greatly to the interest and held the audiences, and we believe made the lectures more impressive. The daily bulletins of the A. S. P. H. service are being used by the lay press throughout the state in particular and the country at large, and in various other ways we believe the people are being enlightened and educated up to the fact that life, without health, is hardly worth while.

A notable decrease in infant mortality is constantly advancing and may be brought nearer the goal sought if Legislatures will enact laws and provide for the maintenance of full time adequately compensated health officers in every community. Surely the human population of our State is entitled to as much consideration as our hogs, cattle, fish and game.

Tuberculosis, Pneumonia—The degenerative diseases and violence, exact the greatest death toll, but the so called "harmless diseases of childhood," measles, whooping cough, etc., annually rob the homes of our State of thousands of children. Despite the efforts of the various forces at work to prevent this unwarranted decrease in our ranks, we regret to report that the rural districts show no appreciable progress, nor will any great improvement be noticed until the present method of public health supervision in the rural districts is reconstructed or reformed. Your chairman feels warranted in making the foregoing statement and stands ready to assume the responsibility thereof. Forty years of active practice, in civil, military and public health work under the flags of three different nations and among all classes of people have afforded ample opportunity to form definite opinions.

The Medical Profession of Michigan, always alert, will be more so as the war progresses, and it is hoped, will unite, and form a solid front, which will carry the banner of Public Health Education into hamlet and household. When the masses are aroused they will force Legislators to enact laws which will protect the home and prevent the "Syphilization" of the coming generation, provide ample funds to increase the scope of the State Board of Health and place under its domination all matters pertaining to vital statistics, pure food and drugs. Last, but not least, Michigan should be considered worthy of a State Department of Health presided over by a full time adequately paid Commissioner of Health, clothed with authority and removed from the realm of pernicious politics. In the opinion of your chairman the entire system of Public Health administration and supervision in Michigan should be replaced by the modern and highly efficient plan in vogue in so many sister states. This will be the crowning effort and will repay ten fold all the expense incurred.

In conclusion, your Committee firmly believes that out of this great sacrifice we are offering to bring about future safety for the world at large, will come, increased interest in the conservation



of human life, enlarged views of moral standards, elimination of racial and religious bigotry, recognition of the rights of all the people, facilities for the education of the ignorant and oppressed, and a greater appreciation of the teachings of the Greatest Educator the world has ever known, Jesus of Nazareth.

Michigan, and the State Medical Society, in particular, has good reason to feel proud of her representatives in all arms of the service, the Medical Corps, especially, and we are convinced that when the Medical History of the war is written the Medical Profession of Michigan will occupy a very prominent place in the records and reflect credit on the State.

JOHN L. BURKART,  
GUY L. KIEFER,  
FRANCES RUTHERFORD,  
EDW. GOODWIN,  
CARL F. MOLL.

Committee

#### REPORT OF THE COMMITTEE ON MEDICAL EDUCATION.

Medical education in Michigan, as elsewhere, has felt the influence of the disturbances incident to the mobilization of the country for military purposes. The medical schools of this State have been confronted with trying problems that have seriously threatened the standards of work that have been established in the past. The most urgent of these have arisen through the need of giving to the service of the country many highly trained men from their faculties and yet not impairing the standards of teaching. There is need that the number of students should not be lessened as the situation demands a larger number of medical men than at any other previous time. It is also essential that the organized services of civil hospitals should not be depleted any more than is absolutely unavoidable.

The call of the country has taken many men from the faculties of the two medical schools of the State. This has seriously depleted the teaching force and has thrown heavy burdens on those who with equal patriotism have remained to maintain the organization of the schools.

In the arrangements for selective military service, the government has provided that medical students qualified for military service may enter the enlisted reserve and after graduation automatically pass into active medical service of the army or navy. Should a student drop out of the school, he automatically passes into the regular draft. It is also provided that medical students after graduation may, if they desire, spend one year as interne in an approved hospital. This provision will do much towards maintaining the medical organization of civil hospitals. There is no provision for special consideration of students in pre-medical courses and undoubtedly many who are genuine medical students will be taken into nonspecialized services. In the future, this seems to threaten a lessening of the numbers of medical students.

At the present time, the number of medical students at the University medical school is somewhat increased over that of last year. The total is 330. There are 115 in the first year class and about 65 will graduate this year.

Teaching and research activities of the University medical school have been directed into special lines by the military needs of the times. Special courses of instruction in various aspects of military medicine have been organized and special research investigations under the direction of the War Department are now being carried on in several of the laboratories of the school. The Department of Pathology is offering a course in military pathology. The Psychopathic Hospital, with the assistance of the other departments of the University Hospital, has since last fall been conducting a special course of intensive training for officers of the Medical Reserve who are to be assigned to neuro-psychiatric work.

The Department of Anatomy has been conducting investigation into the problem of peripheral nerve repair. The Department of Physiology has been interested in the problem of fatigue and with the Department of Anatomy has been studying the effects of concussion upon the ear. The Department of Bacteriology has been interested in investigations into the problem of gas gangrene.

The facilities of the University Hospital have been increased during the year by the erection of a building of thirty beds for the Department of Dermatology. Plans for the erection of a new University hospital provided for by the last legislature are now being prepared.

While the more immediate problems that are confronting the medical schools are military in their character, there are others that have arisen that effect intimately the administrative policy of medical schools. The action of certain State boards in fixing standards for those schools whose graduates are to be admitted to their states for practice has introduced much confusion into the requirements for admission to medical schools. The adjustment of the medical course to these is a matter of much concern.

ALLEN M. BARRETT.  
BURT R. SHURLFY.  
Committee.

#### REPORT OF COMMITTEE ON TUBERCULOSIS.

Mr. President and Members of the House of Delegates:

Your Committee on Tuberculosis submits the following report: The world war has so engrossed our attention and taken members from our Committee that we have not directly carried out any program during the past year. We are at present at work upon a system of standardization of all matters in connection with the tuberculosis problem which we hope to be able to present to your honorable body at the next annual meeting.

ARTHUR F. FISCHER.  
For the Committee.

## REPORT OF THE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

The House of Delegates met in Hosak Hall, Academy of Medicine Building, New York City, on June 4, 1917. The meeting was called to order at 10:10 A. M. by its Chairman, Dr. Hubert Work, Pueblo, Col. Michigan's four delegates, Doctors A. J. Lawbaugh, Chas. F. Kuhn, J. D. Brook and Guy L. Connor were present. Dr. Fred. C. Warnshuis was unavoidably detained and his place was filled by his Alternate, Dr. Chas. F. Kuhn.

President Rupert Blue addressed the House of Delegates. His paper dealt with the emergencies affecting the Association due to the war.

The Secretary's report showed that the Fellowship of the American Medical Association has grown from 43,181 (May, 1916) to 44,010 (May, 1917), an increase for the year of 829.

The report of the Board of Trustees showed that there was an increase in Journal subscription receipts during the year of 1916 of nearly \$20,000; that the *Archives of Internal Medicine* was conducted with a loss of only \$66.00 for the year 1916; and that there was a gain of a little over \$322.00 on the *Children's Journal* during that time. The Co-operating Medical Advertising Bureau has done well. It was created to be of assistance to the state society journals and we believe it has proved to be such. The net contribution the Association had to make up for this Bureau for the year 1916 amounted to \$222.96.

The Board of Trustees passed on February, 1917, the following resolution:

"That all the papers read at the annual session be treated as volunteer papers and that same be published in full in the *Journal* or rejected, or published in abstract, as may seem best."

This action was taken because for many reasons it seems impracticable to publish all papers read in various section in full. Later on the Association may publish two additional journals, one devoted to ophthalmology and one to laryngology and otology.

The Treasurer's report shows the resources of the Association in a satisfactory condition notwithstanding the expense of a long and hard case of litigation in which the Association was the defendant.

The reports of the various committees can be read in detail in the *Journal of the American Medical Association*.

The following officers were elected for the coming year:

President—Arthur Dean Bevan, Chicago.

First Vice-Pres.—Edward H. Bradford, Boston.

Second Vice-Pres.—John McMullen, U. S. P. H. S.

Third Vice-Pres.—Lawrence Litchfield, Pittsburgh

Fourth Vice-Pres.—Holman Taylor, Fort Worth.

Secretary—Alexander R. Craig, Chicago.

Treasurer—William Allen Pusey, Chicago.

Chairman of House of Delegates—Hubert Work, Pueblo.

Vice-Chairman of House of Delegates—Dwight H. Murray, Syracuse.

Members of Board of Trustees—Philip Marvel, Atlantic City; W. T. Sarles, Sparta, Wis.; H. Bert Ellis, Los Angeles; Wendell C. Phillips, Boston.

Chicago was selected as the place for the next meeting. The time of the meeting was left to the Board of Trustees.

GUY L. CONNOR, Delegate.

These reports were all referred to the Business Committee.

The following nominations were made for the personnel of the Nominating Committee:

Richard Burke, Detroit, 12th District.

J. J. Mersen, Holland, 5th District.

G. A. Seybold, Jackson, 2d District.

Guy M. Johnson, Traverse City, 9th District.

J. G. Nicholson, Hart, 11th District.

W. J. Wilson, Detroit, 1st District.

J. D. Brook, Grandville, 5th District.

W. E. Ward, Owosso, 6th District.

On motion of Dr. Aaron, supported by several, the nominations were closed.

The President appointed Drs. Andries, Wilson and Wolfson as tellers.

On spreading the ballot the tellers reported the election of the following Nominating Committee:

Johnson, 9th District.

Seybold, 2d District.

Wilson, 1st District.

Burke, 12th District.

Brook, 5th District.

The President declared their election.

The President appointed the following Business Committee:

Brook, Wayne.

Grosjean, Bay City.

Dodge, Hancock.

Miller, Cadillac.

Godfrey, Calhoun.

Dr. C. B. Gardner of Mt. Pleasant introduced the following resolution which was referred to the Business Committee:

The *Journal* should not be sent to any members in arrears and the three months of grace now allowed be discontinued and annulled.

There being no further business the first session was adjourned.

## SECOND SESSION.

The second session of the House of Delegates was called to order by President Biddle in the Masonic Temple, Battle Creek, May 8, at 8:00 A. M., with a majority of the delegates present.

The Business Committee through its Chairman, C. D. Brooks, submitted the following report:

1. The Committee recommends that the *Journal of the Michigan State Medical Society* be discontinued to members in arrears.

2. We recommend the adoption of the recommendation presented by the Council regarding the enlisted members in the Medical Reserve.

3. Recommend that the following distinguished Medical Officers serving in the Italian and French armies be made honorary members of the Michigan State Medical Society:

General Buono, Chief Surgeon Royal Italian Armies.

Col. Gudae Salvi, Italian Army.

Major E. Pazzi, Second Italian Army.

Col. Hugard, Hospital General, Dijon, France.

4. That the Secretaries of the County Societies be instructed to send to the Secretary of the State Society, a list of the delegates of their respective counties according to the constitution of this society.

5. The Committee endorses most heartily the recommendation of the Council regarding the business efficiency of the Secretary-Editor of the Society.

6. We endorse the report of the Council regarding the disposition of the "patriotic fund" and urge its adoption.

7. We recommend the adoption of the resolution concerning the remission of dues to those in active service.

9. Recommend the appointment of a Committee to investigate Medical Protection Insurance, as outlined by the Council.

9. We heartily endorse the resolution of respect to Dr. B. H. McMullen, and recommend that it be embodied in the *Journal*, with the minutes of this meeting.

10. The Committee strongly concurs in the request of the surgeon general regarding Michigan's quota for the Medical Reserve Corps and recommends that immediate steps be taken by this Society in accordance therewith.

All of which is respectfully submitted.

W. L. GODFREY,

G. D. MILLER,

W. H. DODGE,

C. D. BROOKS, Chr.

Chairman Brooks of Wayne moved the adoption of the report and its inherent recommendations. Supported by several and carried.

Chairman J. D. Brook of Kent presented the following report of the Nominating Committee:

#### OFFICERS.

1st Vice-Pres.—W. S. Shipp, Battle Creek.

2d Vice-Pres.—C. E. Miller, Cadillac.

3d Vice-Pres.—J. C. Chester, Emmett.

4th Vice-Pres.—F. W. Garber, Muskegon.

#### DELEGATES TO A. M. A.

Guy L. Connor, Detroit.

A. W. Hornbogen, Marquette.

J. D. Brook, Grand Rapids.

#### ALTERNATES.

Philip D. Bourland.

W. J. Wilson.

#### COUNCILORS.

2d Dist.—E. W. Toles, Lansing.

4th Dist.—Bert Jackson, Kalamazoo.

5th Dist.—W. J. DuBois, Grand Rapids.

7th Dist.—W. J. Kay, Lapeer.

8th Dist.—A. L. Seeley, Mayville.

9th Dist.—F. Holdsworth, Traverse City.

10th Dist.—J. M. McClurg, Bay City.

12th Dist.—R. S. Buckland, Baraga.

14th Dist.—C. T. Southworth, Monroe.

1919 Meeting Place—Detroit.

Moved by Chairman Brook, supported by several, that the report be adopted.

Moved by Dr. Simpson, supported by several, that the Secretary cast the vote of the House for the several nominees.

The Secretary did so cast and the President declared the nominees elected.

The following communication was received and presented to the House by the Nominating Committee:

May 7, 1918.

To the House of Delegates, Michigan State Medical Society:

Gentlemen:

I would respectfully tender my resignation as Councilor of the Sixth District of the Michigan State Medical Society. Same to be effective from this date.

I remain, very truly and fraternally yours,

ARTHUR M. HUME.

Moved by Brooks of Wayne, supported by Godfrey of Calhoun, that the resignation be accepted. Carried.

Moved by Wilson of Wayne, supported by Godfrey of Calhoun, that the men recommended for honorary membership be so elected. Carried and the President declared their election.

There being no further business the President declared the House adjourned. *Sine die*.

A. P. BIDDLE, President.

F. C. WARNSHUIS, Secretary.

#### GENERAL SESSIONS.

##### FIRST SESSION.

Battle Creek, Mich., May 8, 1918, Masonic Temple.



Meeting called to order at 9:45 by the President, Dr. A. P. Biddle.

Invocation by Rev. Chapman, Battle Creek.

The President: In calling together the Fifty-third Annual Meeting of the State Medical Society, I want to say that we are gathered here chiefly to give expression to the loyalty that we owe to the Government and to the patriotism which we feel for it. (Applause). I ask every one of you to take this meeting in the spirit in which it is held. Back of the men who are leading out is the medical profession, and back of all is the sinews of war. So we have called upon Mr. Smith, of the Old National Bank for a word of welcome.

Mr. W. J. Smith then addressed the Convention as follows:

Mr. President and Members of the Michigan State Medical Society:

It is a great privilege and appreciated pleasure that I am asked to express by your Local Committee when I acknowledge the honor your presence confers upon the City of Battle Creek. It is quite fair to say in all humility of spirit that I can understand the courtesy extended to me only for one reason and that is that the common and accepted frailties of a banker always require the most experienced and scientific treatment. No one expects very much from a banker so no further apology is necessary.

I am sure you have all read the old story of the aged couple wandering through the English Churchyard when the wife called to her husband a short distance away and said, "Come back, John, here are two men buried in the same grave. Read. Here lies a banker and an honest man."

My friends, we are glad to greet you. We only regret that the hospitality of our hearts and homes cannot measure the service you have rendered to humanity. In common with every other citizen I feel the debt of gratitude that has no maturity and can never be paid with any words of praise.

A touch of memory brings a backward glance through the sunny vales of early childhood. I see the old farm home and hear the click of the front gate. The Village Doctor is coming down the winding foot-path. We had watched for him all through that long sultry August afternoon but just at nightfall the benefactor came. His re-assuring word and kindly smile relieved the childish fear. All through the long stretches of the night, when life and resistance seemed at lowest ebb, he stood silent guard, death could not enter and life remained. And in a few succeeding days I knew once more the devotion, the tenderness and cheer of a mother's love, and on down through the eventful years until at the age of eighty her sweet and beautiful spirit passed on to realms eternal.

Recollections of that character have been a treasure of the millions. It is the message that has come down to us through the music of the years and in response to the great call of duty and of service

we have ever heard your answer, "He profits most who serves best."

To my mind, and I think it is admitted by all, the opportunities for your great work reveal a deeper insight into the real vital strength of character than any other field of activity. It is true the banker, the manufacturer, the lawyer and the merchant touch many phases of human life, but their dealings with men of affairs are always surrounded with the influence of mental and physical vigor when their faculties can be applied to the highest point of efficiency, but you observe this view. You see them in that other hour when achievement no longer beckons and the applause of success no longer thrills. That is the final test. That is when the weak and the faint hearted fall by the wayside, and you see the strong character overcome all obstacles, even despair itself, and bring to light the hidden jewels of the human soul.

We congratulate you for your splendid record of consecration, for the example that lifts human effort from the marshes to the heights. You have enriched the treasury of mankind and have led the way for that new manhood and new womanhood now unfolding to bless and adorn the earth. That is why we are proud that you have paid us the compliment to assemble here in this little city we call home.

I am not unmindful of the fact that above and beyond anything I have mentioned the one event that is nearest and dearest to your hearts will be the visit to Camp Custer. Tomorrow you will forget Battle Creek, you will forget the stately mansions and all the fascinations of architectural beauty that you have ever known. You will only be thinking of those soldier barracks, comfortable yet crude and simple in construction, because they shelter hearts as brave and hopes as exalted as ever existed beneath the sweep of the almighty stars. You will find there the culture of the university, the representatives from the marts of trade and commerce, the sturdy sons of toil from field forest and mine. All that education, science, culture and art has been able to accomplish in all the ages past has fought its fruitage in a manhood that will shed imperishable glory upon Wisconsin and Michigan, those proud sister states of the inland seas.

Think of it, those young men in the springtime of their careers, in that period of life when nature calls with a thousand voices to the feast of gladness and opportunity, with the horizon of ambition filled with brightest hope, at a time when love of home and friends and dear ones is most alluring in its charm, those brave fellows do not complain, retreat or hesitate. They bid farewell to everything nearest and dearest on this earth and say, "I am here to defend my country and my flag, on any field of death to save the cause of liberty and vindicate the nation's honor."

They know that every hillside and plain in northern France is one vast scene of weariness, loneliness, hardship and suffering and the messenger of danger rides on every wind that blows, but they do not falter. They have learned the cheer of bravery, the smile of sacrifice and courage of their faith. The great drive is on and they are anxious to be there. They have been trained and they are going. They are hurrying by every road and from

every Camp to France. Every transport that floats the seas is bearing them across with silence and swiftness to the scenes of that awful conflict, but they are not alone. Many of your friends and thousands in your great profession have gone before.

We know that Doctors and nurses are exposed day and night to the enemy's bombs with no protection except the frail roof of the hospital. There is little rest from them as long as the battle rages and the wounded come in steady streams to be comforted, mended and cured.

We are sending the Doctors every day to face this life. Some of them here today are going soon. They will not come back until the fight is over for they cannot be spared. Many of them will never come back to rest from their labors, but will pass into that deeper rest that knows no waking. They will become a part of that dearer dust of America that will mingle with the soil of France. Some writer has said that in the heart of patriotism would come a new flower never seen before by the eyes of men. "It will bloom there after the war is over, a fair white blossom beside the golden lillies of France and it will be known as the Liberty flower, a white emblem of purity, love and universal peace," purchased by the red blood of heroes on a thousand fields of glory.

Men of Michigan, members of a high and holy calling, assembled at a time when the greatest drama in the world's history is being enacted in the theatre of war; at the new dawn, whether it be near or far it will herald a day resplendent in the white light of victory, when the records of your sacrifice and work will read invaluable and immortal service for the great American Republic. Again we bid you welcome to the hospitality of all we have and all we love in the City of Battle Creek.

President: We feel certain that we are welcome to the City of Battle Creek, and now to make it still more so Dr. Stewart, in behalf of the Calhoun County Medical Association will express the sentiment of that Organization:

Fellow Members of the State Medical Society:

I have the honor at this time to extend to you on account of the Calhoun County Medical Society a very hearty welcome. I assure you that we very greatly appreciate your presence here, and I am reminded that this is your second visit to our city within the past year. During this period there has sprung up in our midst Camp Custer with a population almost equal to that of Battle Creek; and tomorrow you will have an opportunity of going out there and seeing the work these young men are doing. There is assembled in that Camp the very pick of intelligence, skill and ability of the young manhood of Michigan and Wisconsin. Battle Creek has given these men a most cordial and hearty greeting—the churches, the various fraternal and other organizations and the private homes are all doing their utmost for them, and we are all proud to have them mingle with our citizens.

Mr. Smith alluded to the large number of threshing machines made here—but I want to say that out at Camp Custer we have a bigger and better threshing machine than we have in Battle Creek,

and when we go out there and see these men, you will agree with me. And every one of these men are filled with the idea that when they are once on the field they will do their part to drive the Kaiser and his associates into Northern Siberia, more in keeping with his withered and frigid soul. (Applause).

President: In behalf of the State Medical Society I desire to say that we accept your hospitality, and sincerely thank you for your cordial and hearty welcome to your city and your people.

President's Address. (See Original Articles this issue).

Dr. Biddle delivered his Annual Presidential address.

Nominations for President.

Dr. C. B. Burr, of Flint: One year ago there was a meeting of this Society held in this city. It had but one object in view—consultation as to the means which we might employ to further the aims of the Government toward the winning of the war against the forces of Hell. And that participation has been given to us, even to a greater extent than we anticipated. We now have an organized profession in the State to co-operate with the aims and efforts of the Government and loyal, earnest co-operation will certainly come from this Society.

Events are now happening that are enormous, tremendous—I should call them colossal except for the fact that "colossal" is such a favorite word in the vocabulary of the Kaiser, we are dispensing with words thus employed about as rapidly as we can. But there is one word that we must preserve for the present, at least—we must give the best expression in our power to hold up the hands of our valued allies—the sturdy Belgian, the self-sacrificing Serbians, the courageous British, the brave French, the valorous Italians—in their struggle to write in letters of red on the banner furled to all the world that Might does not make Right—that Autocracy is doomed and that there must emerge from this conflict a Democracy for all the world.

This is a day of big guns—shooting popguns is out of the game. This is a day for war horses—ponies are no more available. Neither are wild asses from the prairies of Nebraska where their braying has ceased.

This is a day of tanks, of a certain kind. In this Society we need, particularly at this crisis, as presiding officer a big, red-blooded, loyal man—and such we have—and we have many more such available—but the one I wish to name is thoroughly well known to every member of the Medical profession in this State. He has had military experience; he is a forceful speaker, a versatile writer, has been long identified with this Society, a real war-horse in it—a really big gun—he is a tank of a certain kind, a tank filled with medical wisdom, a tank full of benevolence and the milk of human kindness, charity—those things so desirable in the character of a well-ordered medical man—I take great pleasure in nominating, Mr. President and Fellow

Members of this Society, for the high office of President of the Michigan State Medical Association, Arthur M. Hume, of Owosso. (Great applause).

Dr. Stockwell: As a representative of the Medical profession of Port Huron I most heartily support the nomination of our friend of Western-Central Michigan.

There were no other nominations.

#### SERGEANT ATHERTON.

At this point Sergeant Joe Atherton, was presented as a soldier fresh from the trenches, and he was received with pronounced demonstration. He spoke for nearly half an hour, giving a most graphic description of the war, and what is involved—what America may look for—real self-sacrifice in putting in the field at least five million men, and giving of our substance till it hurts, to support these men while they are fighting to win the war for Democracy.

Adjourned.

#### SECOND SESSION.

The Second Session of the General Session was held in front of the 310th Sanitary Train Headquarters in Camp Custer and called to order by President Biddle.

The following resolution was presented by C. B. Burr of Flint:

Resolved: That the Michigan Medical Profession is heartily in sympathy with, and thoroughly determined to assume its part in carrying into effect, the wise and timely declaration of the President to employ force to the limit in waging war to a victorious conclusion against the enemies of democracy led and controlled by the Prussian Kaiser.

Resolved: That medical forces must be employed to the extent of extreme sacrifice to win the war and that the thorough co-operation of the Michigan Medical Profession is freely offered to all the Departments of the Government.

Resolved: That to the end of augmenting its effectiveness there is necessary, legislation conferring rank and additional authority upon Medical Officers commensurate with their responsibilities as imposed by Congress, and corresponding in a measure with the Medical Organization in the armies of the allies of the United States. Such legislation is contemplated by the Owen and Dyer bills.

Resolved: That the Michigan State Medical Society endorses these bills and urges their speedy enactment into law.

Resolved: That copies of these resolutions be forwarded to the President, the Secretaries of the War and Navy, the Military Affairs Committee of both Houses of Congress, the Surgeon Generals of the Army, Navy and Public Health service, the Council of National Defense and the Senators and Representatives from Michigan.

On motion of several the resolution was adopted.

Chairman Brook of the Nominating Committee reported 716 votes cast for Arthur M. Hume of Owosso for President. President Biddle introduced the newly elected President who in a fitting manner expressed his appreciation and commented upon the obligation that rested upon each member in this world's war.

Dr. Biddle moved and was supported by several that the hearty thanks of the Society be extended, the Calhoun County Society, the Commander and Medical Officers of Camp Custer for the provisions perfected and courtesies extended the members in attendance at this session. Carried.

Dr. Roller of Kent moved that the thanks of the Society be extended to Dr. Biddle for the services rendered our Society during his term of office. Carried.

There being no further business President Hume declared the meeting adjourned *sine dei*.

F. C. WARNSHUIS, Secretary.

#### ANNUAL MEETING NOTES.

The following telegram was received:

Base Hospital, Camp Sherman, May 7, 1918.  
Secretary of M. S. M. S.  
Post Tavern. Battle Creek.

I trust that your meeting will prove profitable and inspiring to the members and the people of Michigan. Convey my greetings and regrets that I cannot be with you.

W. T. DODGE.

Dr J. C. Bloodgood of Baltimore was unable to be present on account of sudden illness and high fever.

All sessions convened promptly and conducted their business with promptness and dispatch. There was no dragging or tedious waste of time. Everything was infused with snap and "pep."

Seven Hundred and Sixteen members registered. There were fully one hundred members who arrived on Wednesday evening and Thursday morning. The total number present easily reached 825. It certainly was a wonderful meeting.

The Secretary estimated an attendance of 400. Some member stated in March that he was too optimistic and prophesied an attendance of 250. We were pleasantly surprised with an 800 mark.

Through the courtesy of Camp Officers mess was provided for 400 members. We were indeed sorry we could not issue more tickets to mess but it will be readily perceived we could not impose further on the preparations made by our hosts.



Those who attended the Patriotic Meeting, (the Theatre was filled) were inspired by the addresses of Capt. J. W. Inches and Rev. A. W. Wishart.

The Camp Custer Band and 200 soldiers singing Camp Songs was a pleasant feature of the meeting.

Drs. Stewart, Kingsley, Colver, Allen, Stone, Godfrey of Battle Creek were on the job every minute.

Many of the members missed the setting up of

the Field Hospital under the direction of Lt. Col. Bremerman. It was an inspiring sight for in 45 minutes 9 tents were erected and every thing ready to receive and give the necessary dressings or perform such operations as might be required by 250 wounded.

Never again will our Society witness such an inspiring spectacle as the Division Review. We are more firm in the belief that "We're Going Over," and that it will be all over when those boys get over there.

### PROPAGANDA FOR REFORM.

*Some Nostrums.*—Continuing its policy of giving the public the fact in regard to worthless, injurious or misleadingly advertised nostrums, the Louisiana State Board of Health has analyzed the following "patent medicines." Dermillo, a skin and complexion nostrum composed of zinc oxid, calcium carbonate, starch and salicylic acid in water, colored and perfumed. Wendell's Ambition Pills, a "great nerve tonic," containing strychnin, ferric oxid, pepper, cinnamon and ginger, and probably a little aloes. Orchard White, a toilet preparation to be mixed with lemon juice, reported to be a mucilage containing bismuth citrate, boric acid, alcohol and gum tragacanth. Exelento Quinine Pomade, a hair preparation found to consist chiefly of petrolatum, some liquid petrolatum, a trace of oil of gaultheria, sulphur, and among other things, a trace of quinin. Sloan's Liniment, which appeared to be composed essentially of oil of turpentine, oil of camphor, oil of sassafras and capsicum. Vick's Vap-O-Rub, which appeared to be a mixture of petrolatum with camphor, menthol and oil of thyme, eucalyptus and turpentine. La Creole Hair Dressing, a perfumed solution containing lead acetate, sulphur and glycerin, alcohol and water. Prescription A 2851 for Rheumatism, formerly said to have been known as Eimer and Amend's Rheumatic Remedy, which appeared to be a sherry wine containing 7.5 per cent. potassium iodid. (*Jour. A.M.A.*, April 6, 1918, p. 1024).

*Guaiodine.*—Examination of Guaiodine, a preparation of the Intravenous Products Co., Denver, in the A.M.A. Chemical Laboratory shows that, instead of containing free "colloidal" iodine as claimed, the preparation is essentially an iodated fatty oil, containing only combined iodine. The referee of the Committee on Pharmacology reported to the Council on Pharmacy and Chemistry that equally misleading, in view of the Laboratory's findings, are the implied claims that the antiseptic action of Guaiodine corresponds to that of free iodine. Guaiodine is advertised chiefly for the treatment of gonorrhea by means of obviously false claims. The Council declared Guaiodine inadmissible to New and Nonofficial Remedies because of false statements as to composition and action. (*Jour. A.M.A.*, April 6, 1918, p. 1026).

*Neoarsphenamine.*—The Federal Trade Commission has granted an importing license to the Diarsenol Company, Inc., 475 Ellicott Square, Buffalo, for neodarsenol, the Canadian brand of neoarsphe-

namine. Licenses to manufacture neoarsphenamine have also been issued to The Takamine Laboratories, New York, to the Farbwerke-Hoechst Co., New York, and to the Dermatological Research Laboratories, Philadelphia. The safest and most effective products, provided one has mastered the technic, are the arsphenamines—not the neoarsphenamines. (*Jour. A.M.A.*, April 6, 1918, p. 1027).

*America-Made Acetylsalicylic Acid.*—At the request of the Council on Pharmacy and Chemistry an examination of the market supply of American-Made acetylsalicylic acid has been made in the A.M.A. Chemical Laboratory by P. N. Leech. The investigation shows that there are on the American market, made by American firms, several brands of acetylsalicylic acid that are just as good as, if not better than, the widely advertised Aspirin-Bayer. About a year ago the Council on Pharmacy and Chemistry deleted Aspirin-Bayer from New and Nonofficial Remedies. Since the Bayer aspirin patent expired in February, 1917, thereby making it possible for manufacturers legally to produce and sell acetylsalicylic acid in the United States, the Council established standards for the quality of this unofficial drug. As a result, the following products have been found to meet these requirements and are included in New and Nonofficial Remedies: Aspirin-L. and F., Acetylsalicylic Acid-Squibb, Acetylsalicylic Acid-Merck, Acetylsalicylic Acid-Milliken, Acetylsalicylic Acid-M. C. W., Acetylsalicylic Acid-Monsanto and Acetylsalicylic Acid-P. W. R. (*Jour. A.M.A.*, April 13, 1918, p. 1097).

*Unduly Toxic Arsphenamin.*—In view of the reports in current medical literature of untoward results from the use of arsphenamin and neoarsphenamin, Dr. G. W. McCoy, Director of the U. S. Hygienic Laboratory, Washington, D. C., requests that samples of any lot of these arsenicals which have shown undue toxicity be forwarded to the Hygienic Laboratory for examination. (*Jour. A.M.A.*, April 13, 1918, p. 1110).

*Antipneumococcus Vaccine.*—The work by Lister in the diamond mines of Kimberley, South Africa, gives promise of a successful method of inoculation against lobar pneumonia. Lister finds that the pneumonia prevalent among the workers in the diamond mines is due mainly to three groups of pneumococci, and that inoculation with a vaccine made from the three groups prevents the occurrence of pneumonia as caused by members of these groups. (*Jour. A.M.A.*, April 20, 1918, p. 1163).

# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

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Arthur M. Hume, Chairman.....	Owosso
Guy L. Kiefer .....	Detroit
W. J. Kay.....	Lapeer
W. J. DuBols.....	Grand Rapids

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### EDITOR

FREDERICK C. WARNSHUIS, M.D., F.A.C.S.  
Grand Rapids, Mich.

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All communications relative to exchanges, books for review, manuscripts, news, advertising, and subscription are to be addressed to Frederick C. Warnshuis, M.D., Powers Theatre Building, Grand Rapids, Mich.

The Society does not hold itself responsible for opinions expressed in original papers, discussions, communications, or advertisements.

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Subscription Price—\$3.50 per year, in advance.

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June

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### Editorials

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#### THE FIFTY-THIRD ANNUAL MEETING

Elsewhere in this issue will be found a complete report of the activities of our 53d annual meeting. To those who were present no editorial references of ours will enhance or amplify the personal impressions gained during that session. Mere citation of the facts will not record the inspiration that was imparted.

The Patriotic Meeting on Wednesday evening was what the name implied. The address of General Kennedy, Commander of Camp Custer, and of Lt. Col. Bartlett, Division Surgeon, inspired our confidences and gave testimony as to why Camp Custer stands first among the Cantonments. We know our boys will be safe under their military direction. We are indeed grateful for the many courtesies shown our Society and privileges afforded us during the day at the Camp.

The address of Rev. A. W. Wishart was indeed a patriotic appeal to every loyal citizen. His effort merited the rising of the audience to its feet and the prolonged applause that greeted his conclusion was ample testimony of appreciation. The address, pictures and description presented by Dr. J. W. Inches of his trip to the Italian front gave all a new insight as to the part our Italian allies are assuming in the war. Our only regret was that further time was not available for the exhibition of more

pictures. Dr. Inches description was most interesting, inspiring and imparted a distinct stimulation.

The Section work was characterized by very excellent papers that elicited large attendances. All the section officers merit our thanks for their work in preparing their excellent programs.

The House of Delegates performed its work expeditiously and under the military presiding of President Biddle there was no opportunity for unparliamentary procedure. The Councilors, Delegates and officers elected apparently received the approval of all. The report of the several committees and of the Council reveal the organizations activity during the past year.

There was no contest for the office of President. The unanimous election of Arthur M. Hume of Owosso was a timely recognition of the interest in and the effort expended by him in behalf of the profession of the state.

The Day at Camp Custer exceeded our expectation. The morning Sick Call, the "walks" through the Base Hospital and inspection of barracks and the noon Mess gave all a new insight in Camp life and the efficient military training given to our recruits. The demonstration of setting up a Field Hospital was splendid and revealed the thorough training of the Sanitary Train under Lt. Col. Bremmerman. It took just 45 minutes to set up the hospital and the first case received was on the operating table and everything ready for operation in that short time.

The Division Review is beyond our description. The thousands of troops drawn up in mass formation on that field with the background of freshly leaved trees, the precision of formation, the promptness of all in their readiness when the bugle blew at 1:30 to commence their march was a most wonderful and inspiring spectacle. It was the second review since the establishment of the Camp and our debt is indeed great to General Kennedy for arranging this review for our benefit.

The attendance was beyond all expectation. Seven hundred and sixteen members registered and fully one hundred arrived on Thursday morning. It would be a reasonable estimate to state that 825 members attended.

The meeting is now recorded in our records. Its accruing benefits will exercise a constant influence upon our members. Far into the evening of our lives will we recall our 53d Annual meeting at Camp Custer and Battle Creek.

### THE DRIVE FOR DOCTORS.

In response to the direct appeal to the American Medical Association and its constituent units, the State and County societies by the Surgeon-General our Society has perfected a state organization for thorough work. The Surgeon-General has expressed the opinion that the work of supplying medical officers can be best accomplished by working through organized channels. To that end will our Society's effort be devoted.

Michigan may well be proud of the showing made by her doctors during the past year in supplying medical officers for our military forces. Credit for this showing accrued from the patriotism of the profession and the untiring efforts of Dr. Reuben Peterson.

To no other single person is so much credit due as to Dr. Peterson. He has covered practically every county of the state, delivered numerous addresses before gatherings of county societies and public meetings, he has been the personal advisor of many of our members in determining whether their duty consisted of remaining at home or of applying for a commission and he has written hundreds of letters answering all manner of inquiries as to the Reserve Corps. He has sacrificed personal interests to this task and if we were asked what

one person in Michigan is most responsible for the showing made, the spontaneous answer would be—Dr. Peterson. His name will ever stand foremost in our war record as having devotedly and unstintedly contributed his untiring efforts to the work of filling Michigan's quotas for officers for the Medical Reserve Corps.

In the new order of procedure requested by the Surgeon General Dr. Peterson is not to be "shelved" nor will he remain unrecognized. His efforts and time will continue to be devoted to the work and our Society will profit by his renewed labors and loyal contributions to the increasing tasks that remain to be consummated. At this time we feel that this recognition should be given to the doctor and every member acquainted with the extent of the work that Dr. Peterson has performed.

There is but one end sought and one object to be attained from now on—the supplying of the necessary applicants to fill the quotas allotted to Michigan. We are all pledged to achieve that purpose. We must all work solely to supply these men from Michigan. Each man must answer personally—Is it my duty to go? Can I be spared from my community? You who find your answer in the affirmative come forward *now* and promptly file your application for a commission.

### HONOR ROLL—MICHIGAN.

Ratio of physicians to population and area; number commissioned in Federal Medical services:

COUNTY	Area. Square Miles	Sp. Miles per Physician	Population Est. 1917	Population per Physician	Total No. Physic'ns	Total Women Physic'ns	Physic'ns Under 45	Physic'ns Under 55	Members of Co. Society	Commis- sioned in M.R.C etc.
Alcona .....	684	136.8	5,711	1,142	5	..	2	3	2	..
Alger .....	920	185.0	8,995	1,799	5	..	5	5	4	..
Allegan .....	833	20.8	70,555	1,763	40	1	17	22	23	6
Alpena .....	584	32.4	21,213	1,188	18	..	4	7	16	1
Antrim .....	475	36.5	15,692	1,207	13	..	5	10	6	5
Arenac .....	374	46.7	9,640	1,205	8	..	6	6	2	..
Baraga .....	917	183.4	7,447	1,489	5	..	2	5	5	1
Barry .....	556	20.6	22,721	841	27	2	10	19	9	2
<sup>1</sup> Bay .....	443	5.7	72,515	929	78	2	31	54	48	7
Benzie .....	314	31.4	11,333	1,133	10	..	5	6	5	..
Berrien .....	569	6.5	56,874	653	87	7	31	58	38	7
Branch .....	497	15.1	25,605	775	33	1	9	17	18	2
<sup>2</sup> Calhoun .....	693	4.6	61,984	413	150	21	76	110	97	18
Cass .....	493	19.7	20,624	824	25	..	11	18	16	5
Charlevoix .....	411	25.7	22,954	1,434	16	..	10	11	5	2
Cheboygan .....	725	48.3	19,592	1,306	15	..	5	8	7	4
Chippewa .....	1,573	50.7	26,759	863	31	..	14	20	22	4
Clare .....	582	52.9	9,883	898	11	..	4	6	2	2
Clinton .....	571	19.0	23,129	770	30	..	15	24	25	3
Crawford .....	575	143.7	4,656	1,184	4	..	2	3	3	1
Delta .....	1,169	43.3	34,653	1,283	27	1	13	23	19	5
Dickinson .....	776	48.5	22,448	1,403	16	..	8	12	12	3
Eaton .....	571	11.2	30,499	598	51	2	14	30	34	3

1. Includes Bay City, population 47,494; physicians 65 [M.R.C. 7].

2. Includes Battle Creek, population 28,801; physicians 109 [M.R.C. 14].



## HONOR ROLL—MICHIGAN—Continued.

COUNTY	Area, Square Miles	Sp. Miles per Physician	Population Est. 1917	Population per Physician	Total No. Physic'ns	Total Women Physic'ns	Physic'ns Under 45	Physic'ns Under 55	Members of Co. Society	Commis- sioned in M.R.C.etc.
Emmet .....	485	26.9	20,479	1,138	18	1	6	12	10	..
<sup>3</sup> Genesee .....	655	5.7	81,163	705	115	3	68	93	92	22
Gladwin .....	519	86.5	9,762	1,627	6	..	3	4	3	..
Gogebic .....	1,133	42.0	28,147	1,042	27	..	18	23	17	5
Grand Traverse ..	467	18.7	26,197	1,047	25	2	11	17	18	1
Gratiot .....	579	17.0	28,820	847	34	1	13	22	26	3
Hillsdale .....	597	11.5	29,673	589	52	..	12	34	27	6
Houghton .....	1,019	14.5	104,181	1,488	70	1	50	60	47	12
Huron .....	854	14.7	35,192	606	58	1	14	48	50	1
<sup>4</sup> Ingham .....	553	4.7	63,157	535	118	7	54	81	77	12
Ionia .....	579	12.3	33,550	713	47	1	21	30	34	5
Iosco .....	570	95.0	9,752	1,625	6	..	3	3	3	1
Iron .....	1,200	63.1	19,669	1,035	19	..	9	14	5	1
Isabella .....	572	24.9	23,207	1,009	23	1	5	17	11	3
<sup>5</sup> Jackson .....	707	7.8	57,225	635	90	2	53	64	53	10
<sup>6</sup> Kalamazoo .....	652	5.0	72,191	638	113	12	60	80	75	12
Kalkaska .....	573	95.5	8,800	1,466	6	..	2	4	4	..
<sup>7</sup> Kent .....	860	3.3	180,626	689	262	10	119	189	150	37
Keweenaw .....	554	46.2	10,031	835	12	1	5	8	7	2
Lake .....	579	144.7	4,939	1,234	4	..	2	2	2	..
Lapeer .....	666	20.2	26,033	7,88	33	..	19	20	26	..
Lelanau .....	338	56.3	10,644	1,774	6	..	2	6	2	..
Lenawee .....	743	10.0	47,907	647	74	4	25	41	44	11
Livingston .....	568	22.7	17,736	709	25	1	9	16	14	2
Luce .....	920	153.3	4,748	791	6	..	6	6	5	..
Mackinac .....	1,044	74.6	10,377	741	14	..	2	6	1	..
Macomb .....	472	8.3	32,606	572	57	3	22	42	33	10
Manistee .....	562	21.6	26,688	1,026	26	2	10	14	4	5
Marquette .....	1,870	41.5	50,753	1,127	45	..	24	37	32	8
Mason .....	494	29.0	23,981	1,410	17	1	5	11	7	..
Mecosta .....	571	30.0	19,466	1,024	19	..	7	14	14	4
Menominee .....	1,056	58.7	25,648	1,424	18	..	6	12	13	5
Midland .....	529	52.9	14,005	1,400	10	..	4	8	7	4
Missaukee .....	582	52.9	11,551	1,050	11	..	7	7	6	2
Monroe .....	573	17.9	33,035	1,072	32	1	11	22	21	3
Montcalm .....	724	17.6	32,069	782	41	2	18	27	26	6
Montmorency .....	561	93.5	4,135	689	6	..	2	8	6	3
Muskegon .....	504	8.5	43,161	731	59	2	36	46	40	6
Newaygo .....	851	60.8	20,348	1,453	14	..	4	10	6	..
Oakland .....	886	9.7	53,066	583	91	3	43	66	54	7
Oceana .....	543	30.2	19,645	1,091	18	..	7	14	11	1
Ogemaw .....	580	38.7	9,740	649	15	..	1	5	3	1
Ontonagon .....	1,333	133.3	10,439	1,043	10	..	7	9	7	2
Osceola .....	577	38.5	71,911	1,194	15	1	7	11	8	..
Oscoda .....	576	..	2,434	No physicians reported						
Otsego .....	528	88.0	6,826	1,137	6	..	3	3	3	..
Ottawa .....	565	10.7	49,412	932	53	1	21	32	27	7
Presque Isle .....	678	75.3	13,021	1,446	9	..	5	9	9	4
Roscommon .....	538	538.0	2,627	2,627	1	..	..	1	1	..
<sup>8</sup> Saginaw .....	828	7.9	95,179	906	105	7	35	66	57	19
Saint Clair .....	710	9.7	52,341	717	73	4	22	49	54	3
Saint Joseph .....	503	15.7	26,674	833	32	1	11	25	14	3
Sanilac .....	976	28.7	33,930	998	34	..	8	22	19	4
Schoolcraft .....	1,207	172.4	9,258	1,322	7	..	..	6	6	..
Shiawassee .....	557	10.9	33,246	651	51	..	21	37	30	13
Tuscola .....	827	29.7	34,913	872	40	2	17	26	27	3
Van Buren .....	617	15.4	33,185	829	40	1	13	26	27	3
Washtenaw .....	704	4.0	44,714	255	175	11	98	135	84	43
<sup>9</sup> Wayne .....	620	0.4	1,008,859	683	1,483	58	462	1,246	918	256
Wexford .....	577	33.9	23,621	1,389	17	..	11	13	15	3
Totals .....	57,480	12.5	3,458,185	752	4,598	185	1,844	3,434	2,810	655

3. Includes Flint, population 52,159; physicians 85 [M.R.C. 17].

4. Includes Lansing, population 39,005; physicians 89 [M.R.C. 11].

5. Includes Jackson, population 34,730; physicians 71 [M.R.C. 9].

6. Includes Kalamazoo, population 47,364; physicians 94 [M.R.C. 10].

7. Includes Grand Rapids, population 125,759; physicians 225 [M.R.C. 29].

8. Includes Saginaw, population 54,815; physicians 75 [M.R.C. 17].

9. Includes Detroit, population 554,717; physicians 1,382 [M.R.C. 243].

## HONOR ROLL.

## ALLEGAN COUNTY.

*Allegan*—Elmer Douglas Osmun; Robert Page Stark; Howard Wallace Stuch. *Otsego*—Orrin Dean Hudnutt. *Plainwell*—Willard Robert Vaughan. *Saugatuck*—Robert J. Walker.

## ALPENA COUNTY.

*Alpena*—Clarence Mason Williams.

## ANTRIM COUNTY.

*Atwood*—Bernard J. Beuker. *Central Lake*—Edward Wilbur Vis. *Eastport*—Versile Mornington Gates. *Elk Rapids*—Louis Norman Yerkes. *Mancelona*—Worth W. Walton.

## BARAGA COUNTY.

*Pequaming*—Frank Fremont Marshall.

## BARRY COUNTY.

*Delton*—Maurice James Cross. *Middleville*—Birge Carlton Swift.

## BAY COUNTY.

*Bay City*—Frederick Smith Baird; Frank Winne Brown; Edward Goodwin; Edward Spaulding Huckins; Roy C. Perkins; Floyd H. Randall; Royston Earl Scafford.

## BERRIEN COUNTY.

*Baroda*—Louis Andrew King. *Benton Harbor*—Myron Geo. Becker, Jr.; Carl Apperson Mitchell; Warren P. Morrill; Burton Lewis Stevenson. *Bridgman*—David Littlejohn. *Coloma*—Spencer Van Barnum.

## BRANCH COUNTY.

*Coldwater*—Wilbur Aaron Griffith. *Union City*—Walter Wm. John Bien.

## CALHOUN COUNTY.

*Albion*—Edwin M. Chauncey; George C. Hafford. *Athens*—Elijah Van Camp. *Battle Creek*—James Thomas Case; James Adam Elliott; Robert Vincent Gallagher; Wilfred Haughey; Jesse James Holes; Awra Andrews Hoyt; Karl High Kellogg; Theodore Kolvoord; Asa Charles McCurdy; Willard Nichols Putnam; Kendall Brooks Rees; Albert Howard Ross; Leland Herbert Tower; Carl George Wencke. *Beford*—Kendall Brooks.

## CASS COUNTY.

*Cassopolis*—Edgar Clarence Dunning; Chas. Maxwell Harmon; James Henry Kelsey. *Dowagiac*—Walter Stokes Sharpe. *Marcellus*—Ralph Phillip Jones.

## CHARLEVOIX COUNTY.

*Charlevoix*—Allan Marshall Wilkinson. *East Jordan*—Hugh William Dicken.

## CHEBOYGAN COUNTY.

*Cheboygan*—Arthur Julius Sahs. *Indian River*—Lyle D. McMillan. *Mackinaw*—Allen Charles Tiffany. *Wolverine*—Archibald McKillop.

## CHIPPewa COUNTY.

*Fort Brady*—Everett Allen Anderson. *Rudyard*—Robert Douglass Scott. *Sault Ste. Marie*—Emil Henry Webster; Rollin C. Winslow.

## CLARE COUNTY.

*Clare*—Arthur Robert Mussell; Burton Jay Sanford.

## CLINTON COUNTY.

*Eureka*—Myron Stephen Gregory. *St. Johns*—Walter Abner Scott; Don Harry Silsby.

## CRAWFORD COUNTY.

*Grayling*—J. Atwood Whitaker.

## DELTA COUNTY.

*Escanaba*—Harry J. Defnet; Victor Ryan; Heming Oliver Lindholm; John Jos. Walsh. *Rapid River*—John Lindsay Conover.

## DICKINSON COUNTY.

*Channing*—Robert E. Hayes. *Foster City*—Gustavus W. Moll. *Iron Mountain*—Samuel Edwin Cruse.

## EATON COUNTY.

*Charlotte*—Stanley Allison Stealy. *Grand Ledge*—Wells Blakeslee Fillinger. *Vermontville*—Clyde L. D. McLaughlin.

## GENESEE COUNTY.

*Clio*—Benjamin Thomas Goodfellow. *Flint*—Gordon Henry Bahlman; Chas. S. Ballard; Myron William Clif; Henry Cook; John W. Evers; George Reinhold Goering; Harry Clark Hackman; Wm. Henderson Marshall; Carl Frederick Moll; Ray S. Morrish; Arthur Venton Murtha; Robert Leo Phillips; George Kenneth Pratt; Herbert Elmer Randall; Floyd Albert Roberts; Walter Henry Winchester. *Grand Blanc*—Wells Cook Reid. *Goodrich*—Frederick J. Burt. *Swartz Creek*—Albert Briton Clark; James Houston.

## GOGEBIC COUNTY.

*Ironwood*—Charles David Collins; Edward Hayes Kelly. *Wakefield*—Theodore Suante Crosby; Donald E. MacPhail. *Watersmeet*—George James Curry.

## GRAND TRAVESE COUNTY.

*Traverse City*—Wm. Daniel Mueller.

## GRATIOT COUNTY.

*Alma*—Cyrus Bunting Gardner; Arthur Alma McNabb. *Ithaca*—Clarence Edw. Burt.

## HILLSDALE COUNTY.

*Hillsdale*—Burt F. Green; Elihu Arthur Martindale; Harry Clay Miller. *Jonesville*—Ira James Stoner. *Litchfield*—William Hodgines Atterbury. *Pittsford*—William Edward Allger.

## HOUGHTON COUNTY.

*Calumet*—John Francis Barton; James Rubeo Lisa; Peter Duncan MacNaughton; John D. McKinnon; Bertram Henry Olmstead. *Dollar Bay*—Albert Roache Pearce; Raymond Moralee Schulte. *Houghton*—William Roy Bridgman; Robert Harkness; Alfred C. LaBine. *Laurium*—Murdoch M. Kerr; James Rhines.

## HURON COUNTY.

*Pigeon*—Alfred Elihu W. Yale.

## INGHAM COUNTY.

*Lansing*—Chauncy Levi Barber; Henry Shank Bartholomew; Wayne Alexander Cochran; Marshall L. Cushman; Marinus L. Holm; James Alton Humphrey; Ray Richmond McCrumb; Harold Abind Miller; Forest Ralph Ostrander; Arthur Elliott Owen; Milton Shaw. *Stockbridge*—L. A. Woodlock.

## IONIA COUNTY.

*Ionia*—Verner H. Kitson; Julius Henry Powers; Perry Christian Robertson. *Lake Odessa*—Friedrick L. Morse; Nelson McLaughlin.

## IOSCO COUNTY.

*Tawas City*—Charles Vernor Crane.

## IRON COUNTY.

*Iron River*—Wilhelm Carl Liefert.

## ISABELLA COUNTY.

*Blanchard*—Ralph Ernest Dawson; Theodore Peter Vander Zalm. *Mt. Pleasant*—Chas. D. Pullen.

## JACKSON COUNTY.

*Brooklyn*—Cortlandt Whitehead Schepeler. *Jackson*—Warren Bradley Anderson; Herman Duane Brown; Randall N. Cooley; Cuthbert Earl De May; Chas. Rowse Dengler; Harold Lee Hurley; John Joseph McCormick; Miar John McLaughlin; James Andrew McQuillan.

## KALAMAZOO COUNTY.

*Augusta*—Robt. Eaton Weeks. *Kalamazoo*—Ross Uriah Adams; Ralph E. Balch; Jerome Francis Berry; Orton H. Clark; Ward Eugene Collins; Leo J. Crum; Dan Holton Eaton; Wm. Geo. Hoebeke; Rosco G. Leland; Louis Desenberg Stern. *Richland*—William Newton Kenzie.

## KENT COUNTY.

*Ada*—Raymond C. Breece. *East Grand Rapids*—Fred Plumer Currier, Jr. *Grand Rapids*—Louis Barth; Horace J. Beel; Henry M. Blackburn; Alexander M. Campbell; Louis Henry Chamberlain; John Ralph Coryell; Clyde Wilson Deaver; Willis L. Dixon; John Clinton Foshee; Howard A. Grube; John Thompson Hodgen; John Newell Holcomb; Wm. Aloysius Hyland; John Carl Kenning; Frank

Cameron Kinsey; Milford Arthur Leach; Wm. De Voe Lyman; Wm. Robt. Manlove; Alex. M. Martin; Louis Thomas O'Brien; Henry John Pyle; Omer Roan; Leon Edmund Sevey; Ansel Brooks Smith; Richard Root Smith; Roland Egbert Toms; Sumner Merrill Wells, Jr.; Joseph Burgess Whinery; William E. Wilson. *Lowell*—Aaron C. Button; Hans Peter Gotfredsen. *Grandville*—Jacob Daniel Brooks. *Soldiers' Home*—Howard A. Grube.

## KEWEENAW COUNTY.

*Mohawk*—Albert Roling Tucker. *Phoenix*—John Leo Kelliher.

## LENAWEE COUNTY.

*Adrian*—Artemus Ward Chase; Ara Bird Hewes; Esli Terrill Morden; Leo John Stafford; Mahlon R. Sutton; George Mitchell Lochner. *Clinton*—Robert Anthony Davis. *Deerfield*—Guy Malverton Claffin. *Morenci*—Van Dale Barnes. *Rolling*—John Leonard Meddaugh. *Sand Creek*—William Henry Meddaugh.

## LIVINGSTON COUNTY.

*Howell*—Vern N. Richesen. *Parshallville*—William John Rynearson.

## MACOMB COUNTY.

*Mt. Clemens*—Henry G. Berry; Harold Arthur Kirkham; Charles Allen Martin; Harry Ferris Taylor; Russell William Ullrich; Arthur Jay Warren. *Romeo*—Robert McKay Greenshields; Edgar J. Miller; Milton Case Smith. *Washington*—Curenus B. Lockwood.

## MANISTEE COUNTY.

*Bear Lake*—Ward Herman Norconk. *Copemish*—Russell Ragan Huston. *Manistee*—Elmer Alfred Gunderson; Harlen MacMullen; Andrew A. McKay.

## MARQUETTE COUNTY.

*Gwinn*—David Christian Eisele. *Ishpeming*—Albert V. Deventer Braden. *Marquette*—Howard T. Carriel; Roscoe Conkling Main; Harold Boyce Markham. *Michigamme*—Isaiah Sicotte. *Negaunee*—Ira A. Abrahamson; Emile Cyrus Houle.

## MECOSTA COUNTY.

*Big Rapids*—Wm. Temperance Dodge; Rolla George Karshner; Glen Dewey Ransom; Gordon Hurst Yeo.

## MENOMINEE COUNTY.

*Menominee*—Calvin Ross Elwood; Walker Raleigh Hicks; Stephen Coddington Mason; Earl Vinton McComb; Henry Thomas Sethney.

## MIDLAND COUNTY.

*Coleman*—Chas. Vernell High, Sr. *Edenville*—John Elmer Heslop. *Midland*—James Henry Johnson; Rene James St. Louis.

## MISSAUKEE COUNTY.

*Lake City*—Nelson Abbott; John Foge Doudna.



## MONROE COUNTY.

*Dundee*—Hugh Rannells Hildebrant. *Monroe*—Herbert Wm. Landon; Frederick Clayton Thiede.

## MONTCALM COUNTY.

*Carson City*—Don Villette Hargrove. *Greenville*—Albert Stewart Barr; Albert James Bower. *Howard City*—Noble William Miller. *Lakeview*—Lee Earl Kelsey. *Stanton*—Mortimer E. Danforth.

## MONTMORENCY COUNTY.

*Hillman*—George Fenton Lister; Albert Joachim Schmaller. *Lewiston*—Archie Currie MacKinnon.

## MUSKEGON COUNTY.

*Montague*—Henry Augustus Kling. *Muskegon*—Constant M. Colignon; Burns Rush Eastman; Leslie Albert van der Linde. *Whitehall*—Henry S. Cole; William Louis Hercik.

## OAKLAND COUNTY.

*Birmingham*—Lloyd Gully Campbell; George Paterson Raynale. *Clarkston*—Russell Graham Edgar. *Oxford*—George William MacKinnon. *Pontiac*—Lucius Augustine Farnham; Ellsworth Orton. *Rochester*—Charles Spurgeon Strain.

## OCEANA COUNTY.

*Hart*—Clinton Day.

## OGEMAW COUNTY.

*West Branch*—Robert Jay Beeby.

## ONTONAGON COUNTY.

*Ewen*—Edward Alexander Florentine. *Greenland*—Edwin James Evans.

## OTTAWA COUNTY.

*Berlin*—John Jay Miller. *Coopersville*—Harry Lieffers. *Grand Haven*—Cornelius John Addison. *Holland*—George Henry Thomas; William Westrate. *Nunica*—Clayton Andrew White. *Zeeland*—Joe DePree.

## PRESQUE ISLE COUNTY.

*Onaway*—Joseph Sill; Fred. William Wastell. *Posen*—Fred Porter Nevius. *Rogers City*—William Woodborough Arscott.

## SAGINAW COUNTY.

*Birch Run*—Harvey Benjamin McCrory. *Burt*—George Wesley Peart. *Saginaw*—George Laviorious Alger; James Deacon Bruce; Benj. Franklin A. Crane; Walter Alexander De Foe; Wm. Franklin English; Bernhard Friedlaender; Leon Brayton Harris; Matthew Kollig; Alexander Reid McKinney; Henry John Meyer; Wm. Louis Miller; James L. Passmore; Norman James Pike; Emil Philip W. Richter; Bert Bessac Rowe; John Thomas Sample; Roy S. Watson.

## SANILAC COUNTY.

*Decker*—Clayton Gregg Woodhul. *Marlette*—

Raymond G. Tuck. *Peck*—John Clyde Webster. *Snover*—Hugh H. Angle.

## SHIAWASSEE COUNTY.

*Durand*—James Arthur Rowley. *Byron*—Hermon Ed. Boice; Robt. Ray Fox. *Henderson*—Thos. Grover Amos; Glenn Taylor Soule. *Owosso*—Alfred F. Arnold; James Johnson Haviland; Harold A. Hume; Jesse Obed Parker; George Peter Sackrider; Egerton Thomas Wilson. *Shaftsbury*—William Hebert Dunham. *Vernon*—Arden Nathan Howe.

## ST. CLAIR COUNTY.

*Algonac*—Walter Elijah Bostwick. *St. Clair*—Frank Vern Carney. *Yale*—Wm. Guthrie Wight.

## ST. JOSEPH COUNTY.

*Burr Oak*—John Joslyn Kelley. *Colon*—Wm. Eck Doran. *Three Rivers*—Arthur W. Scidmore.

## TUSCOLA COUNTY.

*Caro*—Frederick P. Bender. *Millington*—Wynne Clark Garvin. *Richville*—Ottomar Von Renner.

## VAN BUREN COUNTY.

*Bangor*—Norman Dwight Murphy. *Hartford*—John Duncan Stewart. *Lawrence*—Duane Wesley Crankshaw.

## WASHTENAW COUNTY.

*Ann Arbor*—Robert H. Baker; Hugh McDowell Beebe; Clarence Austin Berge; James Fleming Breakley; Roy Bishop Canfield; Otis Merriam Cope; Robert H. Criswell; Roland S. Cron; Charles Beyland G. de Nancrede; Richard Wm. Denney; Carl Walter Eberbach; Joseph Alexander Elliott, Jr.; Nellis Barnes Foster; Albert Carl Furstenberg; Evan Griffith Galbraith; Edwin Carl Ganzhorn; John L. Gates; William Henry Gordon; Harry H. Hammel; Howard Morton Holcombe; Robert Scott Ideson; Arnold F. Jacoby; Hubert Rudolph John; Harthur Lewis Keim; Lyle Boyle Kingery; Rollan Walter Kraft; Maurice Clock Loree; Harry M. Malejan; Russell A. A. Oldfield; John Jeremiah O'Leary; Reuben Peterson; Rudolph Herman Ruedemann; Walter Neale Salisbury; John Wesley Sherrick; Floyd Raymond Town; Geo. Douglas Treadgold; Warren Taylor Vaughan; Damon Orian Walthall; Udo Julius Wile. *Sal'em*—Edward Payson Waid. *Ypsilanti*—Howard Isaac Post; Thomas Robert Whitmarsh. *Whitmore Lake*—Guy Garland Alway.

## WAYNE COUNTY.

*Detroit*—De Witt Carter Adams; Edward Joseph Agnelly; Herman Fred Albrecht; Frank Clinton Anderson; Warren L. Babcock; Frederick W. Baeslack; Max Ballin; Don C. Bartholomew; Charles Barton; Robert J. Baskerville; Robert Beattie; Harold A. Beck; Clarence Herbert Belknap; William Oscar Benjamin; Zina Braden Bennett; Harry

S. Berman; Isadore I. Bittker; Fred Horton Blanchard; Jacob Rolland Bolasny; Edmund W. Bolio; Ralph Hug Bookmyer; Richard F. Boonstra; Henry Robt. Boyes; Frank B. Broderick; Clark D. Brooks; William Horatio Browne; Wm. S. Brownell; Bruno Berthold Brunke; John D. Buck; Frederick G. Buesser; Glenn A. Bulson; John Knox Burns, Jr.; Lowell M. Bush.

Thomas P. Camelon; Geo. Henry Campau; Duncan Alexander Campbell; Clarence Candler; Edward K. Carmichael; Glenn Blish Carpenter; James G. Carr; Henry R. Carstens; John Henry Carstens; Albert Edward Catherwood; Aaron Lee Chapman; Clarence A. Christensen; Harold Francis Closz; Don Avon Cohoe; Homer C. Collins; Lannes Irving Condit; Ray Connon; Bernard Francis Corbett; Langdon T. Crane; Ernest Keys Cullen; Hampton Pharr Cushman.

Samuel Solomon Danziger; Milton Alfred Darling; Jos. Laudium Desrosiers; Harry Franklin Dibble; John Clinton Dodds; Daniel Raymond Donovan; Ira George Downer; David Bernard Downing; George Adam Drescher; Leo John Dretska; Adolph Ernst Dreyer; Charles Frederick DuBois.

Frederick Eakins; Clarence Henri Eisman; Rolan Renford Ensor; Arthur William Erksitz.

George E. Fay; Ray Leopold Fellers; Charles Joseph Foley; Antonio Joseph Font; Walter David Ford; Henry Edgar Fraser; George Edward Frothingham.

Claude Benjamin Gaines; August Ernst Gehrke; Isaac S. Gellert; William Stephen Gonne; John Whitlock Gordon; James Gostanian; Raymond Salot Goux; William Gramley; Hunter Lee Gregory; Thomas Reuben Keller Gruber; Samuel Charles Gurney.

Ernest William Haass; Carl Hanna; Beverly Drake Harison; Winfred Bronsart Harm; Albert Edward Harris; Earl R. Haris; John G. Harvey; James Ward Hawkins; Austin Wm. Heine; William Henderson; Preston M. Hickey; Louis J. Hirschman; George Hoffmeister; Arthur D. Holmes; Lawrence Nicholas Host; Abraham Willis Hudson; Harold S. Hulbert; Leroy Wetmore Hull; Willard Hunter Hutchins.

James W. Inches; Harry H. Jackson; Byron Homer Jenne; Alpheus Felch Jennings; Charles G. Jennings; Nathan Joseph Jessup; Morrell Mallory Jones.

Ladislaus Roman Kaminski; Zeno Leo Kaminski; Wm. James Kane; John Fredk. Kelly; Johnston Burnside Kennedy; William Young Kennedy; Frederick Clinton Kidner; Edw. David King; Paul Anthony Klebba; George Leo Koessler; Abraham Kovinsky; Albert Henry Krohn; Duffield Roy Kruger.

Alfred Daniel LaFerte; Rudolph Harold Lambert; Carl Niel Larsen; Bror Hjalmar Larsson; A. F. J. Lecklider; Ernest C. Lee; Henry Robt. Leiblinger; Daniel James Leithauser; Alfred E. Lemon; Paul Herman Lippold.

Nelson MacArthur; Robert Bruce Macduff; Frank Benjamin MacMullen; Otis Bush Mallow; Vincent Samuel Mancuso; Walter Williamson Manton; Thomas Blaine Marsden; Robert Michael Martin; James Dwight Matthews; Kenneth Fuller Maxey; Emil Valentine Mayer; Willard D. Mayer; Frederick McAfee; Arthur McArthur; James Herald McCall; Wm. Raymond McClure; Carey P. McCord; Crawford Ward McCormick; Theodore Alexander McGraw, Jr.; George Edwin McKean; Angus McLean; Henry Oliver McMahon; Charles H. Merrill; Ellsworth Paro Mills; Robert Conrad Moehlig; Stephen Gregory Mollica; Harold L. Morris; Walter Muellenhagen; Charles Robert Mueller, Jr.; Thomas F. Mullen.

Arthur Joseph Neumann; Frederick Henry Newberry; Arthur Wilmot Newitt; Harry J. Noble; Ralph Arthur Norris.

William Austin O'Brien; Harold Fredk. Ohrt; Geo. Vernon Oill; Robert W. Goldsborough Owen.

Leon Edward Pangburn; Walter Robert Parker; Grover Cleveland Penberthy; Orlando Wm. Pickard; Lyman Justin Pinney; George Edward Potter; Presley Louis Pound; William Henry Price; Wyndand van Korleer Pyle.

Octavius Marion Randall; Claude Burton Ray; Harry Walter Reed; Heinrich Albert Reye; James Milton Robb; Paul Charles Rohde; Herman Hjalmar Runo; Frank Leithe Ryerson.

Homer E. Safford; Wm. Graham Schlegelmilch; Harry B. Schmidt; Ernest Charles Schultz; James Bradford Seeley; Ward Francis Seeley; Alphons Mahlon Shafer; Reed Albert Shankwiler; Lyle Orting Shaw; Harold Koch Shawan; William LaRue Sherman; Burt R. Shurley; Arthur Ralph Smeck; Alba Lee Smith; Clarence Vernon Smith; Eugene Smith, Jr.; Frank Harvey Smith; Frederick Janney Smith; Theodore Henry Smith; Clarence Stefanski; Frank T. F. Stephenson; Alexander Meiklejohn Stirling; Lindley H. Stout; Luther Hinton Stout; Frank Suggs; Hugh Albert Sullivan; Angus Price Sutherland.

Rolfe Tainter; Griffith Arthur Thomas; Arthur Rudolph Timme; Charles Lewis Tomsu; Harry N. Torrey; Emmett Calvin Troxell; Arthur Turner.

Clyde Roger Van Gundy; James A. Van Horne; George Van Rhee; Colin Campbell Vardan; John Walter Vaughan; Victor C. Vaughan, Jr.; Milton D. Vokes.

Frank Banghart Walker; Jos. A. Wall; Charles

R. Walsh; Frank Norman Wilson; George Wayne Wilson; Robert A. Wollenberg; Grover C. Wood. Harry Benjamin Yoh; John Campbell Young.

*Eloise*—Joseph Harvey Chance. *Hamtramck*—Robert Henry Carmichael. *Highland Park*—Martin William Caveney; George Samuel Foden; Richard Henry Juers. *Northville*—Thomas Burnfield Henry. *Redford*—Lewis Nelson Tupper; Roy Du B. Tupper. *Trenton*—Howard Bligh Kinyon. *Wayne*—Romeo Horatio Earle. *Wyandotte*—Glen Long Coan; William H. Homer; Joseph G. Knapp.

#### WEXFORD COUNTY.

*Manton*—Paul W. Bloxsom. *Mesick*—John For-dyce Gruber; Albert Edw. Stickley.

### THE NEED FOR MEDICAL OFFICERS.

The time has come for a plain open discussion of facts and the clear presentation of the obligation that rests upon the medical profession in the work that is and must for the present be the foremost business of every loyal citizen—War.

There are now in active service 22,000 medical officers. Every man who has accepted a commission up to 50 years of age has been ordered to active duty.

It is intimated that our army is to be increased to 3,000,000 men with a possibility of a further increase to 5,000,000.

It was the rule that the ratio of medical officers should be seven medical officers to every 1,000 men. The experience of our Allies and our own experience of the past year demonstrates that that ratio is too small. The number has now been increased to the ratio of 10 medical officers to every 1,000 men.

An army of 3,000,000 will require 30,000 medical officers. An army of five million will create the need of 50,000 medical officers—doctors.

Reliable surveys reveal that we have approximately 142,000 doctors in this country of every age, active and retired from practice. There are 76,067 doctors between the ages of 21 and 45.

The Surgeon General is asking for 5,000 doctors for immediate duty and 2,500 a year for the duration of the war at our *present* mobilization plan of three million men. The

Navy is asking for 2,000 doctors for immediate duty.

The number of medical officers discharged during the past few weeks has exceeded the enlistments so that in place of increase there has been a *decrease* in the number of medical officers. The discharges are occasioned by physical disabilities, domestic emergencies, sickness and deaths. For the immediate future the number of discharges is going to increase as the work becomes heavier and the demands of field work increases.

During the past year the response has been very largely inspired by general appeal and no real systematic effort was made. It is true that the Medical Division of the Council of National Defense conducted a partial survey and ineffectual attempt. Its officers did create state committees and the state committees succeeded in organizing some states but were not successful in many states. The work was never fully organized and was characterized by many letters, bulletins and disorganized effort that created much confusion and doubt. Further, it must be remembered that the Council of National Defense is merely an advisory body and has no vested authority or jurisdiction.

"The Council of National Defense shall nominate to the President and the President shall appoint an Advisory Commission. The members of the Advisory Commission shall serve without compensation, but shall be allowed actual expenses of travel and subsistence when attending meetings or engaged in investigations pertaining to its activities. The Advisory Commission shall hold such meetings as shall be called by the Council or provided by the rules and regulations adopted by the Council."

Two or three divisions of the Advisory Commission have assumed functions that the law doesn't give them and this is especially true of the medical section. The letter heads of the medical section are printed "Council of National Defense" and contain nothing about its being merely an advisory commission.

Since writing the above paragraph we have again been assured of the correctness of the statement therein contained.

On April 20th the Surgeon-General of the Army appealed direct to the officers of the American Medical Association for assistance in securing the needed Medical Officers. The War



Committee of the A. M. A., under authority granted by the House of Delegates at the New York Annual Meeting, promptly replied and pledged to the Surgeon-General the support and activity of the National Organization and its constituent units, the State and County Societies, to supply the needs of the Medical departments of the Military forces and placed at the disposal of the Surgeon-General the valuable and efficient assets of the A. M. A. as are centralized in our national headquarters in Chicago.

Here it is well to impart that the A. M. A. has not been inactive during the past year. It has supplied the Surgeon-General with data concerning every applicant for a commission; its complete personal record files were constantly consulted by Washington officials; thousands and thousands of printed circulars, cards, records, tabulated lists in addition to distribution of 120,000 application blanks and the clerical force of 200 odd individuals have been engaged for weeks on department work. Officers of the association have been in constant touch with the Surgeon-General and Dr. Simmons has been in Washington every week or two. The impression must not be maintained that the A. M. A. has been inactive. On the contrary it has done a tremendous amount of work which the Surgeon-General openly acknowledges.

The tender of the A. M. A. was immediately accepted by the Surgeon-General. A conference of officers of the A. M. A. and of State Secretaries was promptly called and held in Chicago on April 30th, 1918. It was attended by President Charles Mayo and President-elect A. D. Bevan, trustees and officers of the A. M. A., the A. M. A. War Committee and forty-three state secretaries. In addition there were three personal representatives of the Surgeon-General. The conference was in session all day and concluded with the adoption of a definite plan of action. This plan will be discussed in another part of this editorial.

The foregoing statement causes it at once to be apparent that the following obligation rests upon the profession:

1. Seven Thousand Doctors are needed in

the next sixty days—preferably thirty days.

2. Twenty Thousand additional doctors will be needed if our army is increased to five million men.

3. Twenty-five hundred to five thousand doctors will be required each year for the remainder of the war.

4. Michigan must supply 250 doctors in the next 30 to 60 days.

5. Michigan must supply not less than 12 doctors *every month* thereafter for the *remainder* of the war.

6. *One out of every four doctors in Michigan must apply for a commission* and be ready to go when called.

7. Rural communities must not be deprived of its doctors. Neither must industrial factories and transportation companies be bereft of their company doctors.

8. Men physically incapacitated for army service must stand ready to relinquish their practices and be willing to supply the needs of other communities so that the physically fit doctor of that community may be released for army service. Such service is equally patriotic.

Doctors of Michigan the call has come to you. It becomes imperative that you give it careful consideration and determine *your* responsibility, *your* duty and how *you* shall respond. The Chicago Conference adopted the following resolution:

To William C. Gorgas, Surgeon General, U. S. Army:

We, the secretaries of the several constituent state medical associations of the American Medical Association in conference assembled at Chicago, April 30, 1918, declare:

We express our gratification that the Surgeon General has called upon the American Medical Association and all its constituent bodies to co-operate with him in mobilizing the medical profession for the war;

We do hereby pledge to the Surgeon General and through him, to our flag and our country that we will use every power at our command to bring to the military forces of the country such assistance as the Surgeon General may require of us;

It shall be our endeavor to co-operate to the fullest extent with any organizations now existing

or that may hereafter be created in the execution of this pledge.

This conference appeals in the strongest terms to the patriotism and loyalty of every member of the medical profession to give serious thought as to where his duty lies and hold himself in readiness to subscribe to the cause in order that the honor, dignity and patriotism of the medical profession of the United States may forever be placed beyond question.

Respectfully submitted,

F. C. WARNSHUIS, Michigan.

E. J. GOODWIN, Missouri, Chairman.

D. E. SULLIVAN, New Hampshire.

Committee on Resolutions.

To acquit ourselves and honorably fulfil this pledge the following plan of action has been instituted by the American Medical Association:

#### ORGANIZATION.

1. War Committee of the American Medical Association. The Chairman of this committee to be the direct avenue of approach to and from the Surgeon-General.

2. State War Committee appointed by the State Society President composed of three men of whom the Secretary shall be Chairman. Such State War Committee shall be the avenue of approach to the National Committee and will receive its orders and be responsible for the work within the boundaries of its state.

3. County War Committees of County Societies. These County Committees to be appointed by County Societies with the County Secretary as Chairman. The County Committee becoming responsible for the work in its County and reports to the State Committee.

With such a compact and systematized organization emanating from an already efficient professional organization it is proposed to attain the following ends:

#### ACTIVITY.

1. A survey of every county of the state and a personal census of every doctor. This data to supply accurate information as to fitness for service and ability to serve. Likewise to determine the needs of communities and to ascertain in how far the men practicing in every com-

munity can be spared without jeopardization of civic and industrial requirements.

2. The determining of quotas of medical officers from each community that are available for service.

3. The solicitation of doctors who can go and can be spared to cause them to apply for and accept commissions.

4. In the event of pressing need to supply locum tenens so as to protect civic needs and release doctors for active service.

5. To carry out the orders of the National War Committee as they may be issued and to do our part to respond to the demands made upon the profession by the Surgeon-General.

President Biddle has appointed the following State War Committee for Michigan:

Chairman: F. C. Warnshuis, State Sec.  
Jennings, Detroit.  
Turner, Houghton.

The activity of this committee is recorded elsewhere in this issue.

We as a profession must become thoroughly convinced and impressed with the fact that a solemn responsibility is ours. We must realize fully and completely that *we are at war*. We are engaged in a fearful struggle that demands our most intensive, prompt and active support. Definite things must be done *now*. *Prompt* action must come. We cannot postpone, delay or put off. War is now our foremost business and so *supercedes* everything else.

You secretaries of County societies must *immediately organize* the work in your counties. *Drop your practice*, everything, to perfect your local organization. When a wire, or letter is sent you do not put off for one moment the answering of that letter or the performance of the duties conveyed in that communication. *Answer by first mail*. Be *prompt*, Wake up! ! *We are at War!* ! you *must* respond with military snap and promptness. For your country's sake don't postpone doing what is asked of you. The need is great. You *must* realize and acquit yourself of the trust imposed.

To You Doctors we urge that you review and deliberate, yes into the far hours of the night,

as to what is your personal duty in this crisis. Remember you owe an allegiance and duty to your country and its flag. It is not, must not be a question as to what are you going to get out of it. It resolves itself into, What are *you* going to *give*? We must sacrifice and sacrifice until it hurts and hurts if needs be to the very marrow. What are *you* going to give? What are *you* going to do? Pay no attention to your neighbor. This is *your* problem, it is for *you* to give *your* answer. What is *your* answer?

Personally we know what the response to this call will be by the profession of Michigan. We stated at the Conference that Michigan would respond in fullest measure and that we would "Carry On" to the end. To do so we must become aggressively active *now*.

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### Editorial Comments

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We refer our members to the resolution adopted regarding the obligation assumed to fill our quota for the Medical Reserve Corps and the duty resting upon each member. We also refer our members to the two editorials on the same subject in this issue. Get in touch with your County Secretary and lend him your every aid in this work. We desire to impress you with the pressing need that exists for Medical Officers. You who can go are needed now.

In 1910 the state's attorney of Cook County (Chicago) was petitioned to institute "quo warranto" proceedings against the American Medical Association on the grounds that the Association's affairs were being conducted illegally in that its officers were elected at annual sessions held outside of the state of Illinois. The state's attorney refused to take action in the matter, and later, the attorney general of the state, who was appealed to, also refused to act. January 5, 1911, mandamus proceedings were begun in the Circuit Court of Cook County, Illinois, to compel the state's attorney to initiate the quo warranto action which he had declined to institute. Until December 20, 1915, the issue was between the parties asking for the "mandamus" and the state's attorney of Cook County, Illinois; the point at issue being the technical one as to whether the states' attorney was compelled to act or had discretionary authority in the matter. The case went through the lower courts and finally was carried to the Supreme Court of Illinois, which in December, 1915, refused to hear arguments on the

merits of the cause as it related to the American Medical Association, but ordered the Circuit Court to take up the original quo warranto proceedings designed to raise the question of whether or not Illinois corporations "not for profit" are compelled to hold their elections and conduct their business within the confines of the state. Up to this point the American Medical Association was not technically interested in the controversy; now, however, it became a party in the action. Quo warranto proceedings against the members of the Board of Trustees were instituted in the Circuit Court of Cook County, Illinois, which after trial rendered a decision favorable to the Association. The case was then carried to the Appellate Court of Illinois, which confirmed the decision of the Circuit Court. An appeal was finally made to the Supreme Court of Illinois, which last week (April 16) rendered its decision, settling the question. This decision is entirely satisfactory so far as the Association is concerned. One paragraph of the opinion reads:

It seems reasonably to follow that if a corporation not organized for pecuniary profit may hold meetings at stated times outside of the State of Illinois, composed of delegates selected by the constituent associations, for the transaction of business of the corporation, it is not unlawful to authorize and provide for the election by said house of delegates of trustees of the corporation. The American Medical Association was organized solely for the purpose of the advancement of medical science. Its purpose was to improve methods for the treatment and prevention of disease of the human race. Its usefulness for these purposes would be seriously interfered with, if not absolutely destroyed, if it could not provide for the election of trustees from the most efficient men in the association throughout the United States, by delegates selected by the constituent associations from the various States in the Union. Such authority to the house of delegates is conferred by the by-laws and is not in conflict with or prohibited by the constitution or laws of Illinois relating to corporations not for pecuniary profit.

The decision is important not only to the American Medical Association, but also to all organizations incorporated under the law of Illinois—in fact of any state—governing corporations "not for profit."

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### BOIL IT DOWN.

Have you had a thought that's happy?  
Boil it down.  
Make it short and crisp and snappy—  
Boil it down.  
When your mind its gold has minted,  
Down the page your pen has sprinted,  
If you want your effort printed,  
Boil it down.

—The Survey.



### Correspondence

U. S. Base Hospital, No. 17, France,  
April 3, 1918.

Dr. J. B. Kennedy, Grace Hospital,  
Detroit, Mich.

My Dear Doctor:

I just received a letter from Detroit, enclosing a clipping from one of our daily papers, of an article written by you on the present status of Medical education in Michigan and Detroit. I read it with great interest for it put the matter in a very graceful and diplomatic manner before the public, and without reflecting criticism, it pointed out the benefits the public of Detroit would receive from scientific medicine when taught in a great city that has abundant hospitals and a vast field of clinical material.

After spending several months here among the Military Hospitals one is quickly convinced that the young surgeon of today must have clinical experience, to bring about the desired results in reparative surgery, and to prevent, as far as possible, a multitude of hopeless cripples as America's souvenir of this war.

I wish to congratulate you on your splendid article, and thank you for what I believe you have done for the benefit of Medicine, Clinical Surgery and Clinical Medicine can only produce satisfactory results when taught in great centers of population, where all varieties of diseases and injuries can be daily observed by the ambitious student of scientific medicine.

We are quite busy at the hospital now. We received a convoy of 367 patients last night, and a small convoy yesterday (Americans' and two them had received "The Croix de Guerre" after being carried to the rear of the battle field. This certainly makes one feel proud of the American soldiers, and I believe in time that the Americans will have as many Military honors (proportionately), as the soldiers of any other nation. But we do not desire that any shall receive the Iron Cross of the Hun.

Trusting that you and your friends are all well, I am, as ever,

Yours truly,

ANGUS McLEAN.

### State News Notes

You are invited to attend the 30th Annual Clinic of the Alumni Association of the Detroit College of Medicine and Surgery, Detroit, June 3rd to 7th, 1918.

June 3rd—Harper Hospital—Dr. C. E. Simpson in charge.

8 to 11 a. m.—Surgery. Max Ballin, J. H. Carstens, George Potter, W. E. Blodgett, George Kamperman. Medicine, C. C. Jennings, C. W. Hitchcock, Wm. A. Evans. Out Patient Department.

11 a. m. to 5 p. m.—Amphitheatre. Hugh T. Patrick, Chicago, Illinois, Neurology. Plinn F. Morse, H. R. Varney, Fred H. Cole. Don M. Campbell, G. E. Frothingham. Out Patient Department.

8:30 p. m.—Wayne County Medical Society Building. Dr. Robert Morris, New York City, Surgery of the Psychosis and Neuroses.

June 4th—Grace Hospital—H. W. Hewitt in charge.

Amphitheatre. R. J. Palmer, Goitre. Amphitheatre. C. E. Vreeland, Vomiting, Room No. 2. George Myers, Infection of Hands. Amphitheatre. John T. Watkins, Early Diagnosis of Pulmonary Tuberculosis, Room No. 2. R. H. Stevens, Roentgen Diagnosis of Gastric Ulcer. Harper Hospital Amphitheatre. Dr. Robert Morris, New York City, Appendicitis, four phases. Amphitheatre Grace Hospital. Frank Kelly, Inguinal Hernia, Room No. 2. H. W. Plaggemeyer. Some Practical Points in Treatment of Prostatic Diseases. Amphitheatre Grace Hospital. J. B. Kennedy, Procidentia Uteri, Room No. 2. David J. Levy, Diseases of Children. Amphitheatre Grace Hospital. Hugh Hagerty, Pyosalpinx, Room No. 2. Harold Wilson, Chronic Nasal Infections. Reception at College Building, Laboratory Demonstration, Inspection of Building, Luncheon.

June 5th—St. Mary's Hospital—James E. Casey in charge.

W. J. Seymour, Surgery. W. A. Repp, Treatment of Uterine Prolapse. E. W. Mooney, Pneumonia. A. W. Ives, Neurology. Wm. M. Donald, Infections of Unusual Type, during the past spring. Ray Andries, Diseases of the Biliary Tract. A. W. Blain, Goitre. A. P. Biddle and R. C. Wollenberg, Treatment of Cutaneous Disorders in Faulty Metabolism. Harper Hospital Amphitheatre. John B. Deever, Philadelphia, Pa., Surgery. W. E. Keane, Determination of Source of Pus in Urine. Dr. Eugene Smith, Ophthalmology and Otology. W. J. Wilson, Jr., Use and Abuse of Digitalis. F. W. Robbins, Treatment of Syphilis. G. C. Chene, Gastro-Intestinal Diagnosis with X-ray. Robert W. Gillman, Some of the Common Eye and Ear Diseases. Stanley G. Miner, Nose, Throat and Chest Surgery. Neal L. Hoskins, Bedside Clinic. A. Kersten, Value of X-ray in Disorders of Pelvis of Kidney. Class Reunions, 1873, 1878, 1883, 1888, 1893, 1898, 1903, 1908, 1913.

June 6th—Harper Hospital—R. C. Jamieson in charge.

Surgery. C. D. Brooks, John N. Bell, A. D.

McAlpine, E. G. Martin, Daniel LaFerte. Medicine. E. W. Haass, Hugo Freund, Wm. A. Evans. Amphitheatre Harper Hospital. Bertram W. Sippy, Chicago, Illinois, Peptic Ulcer. Herman Kiefer Hospital. A. M. Wehenkle, Tuberculosis. Guy L. Kiefer, George Sewell, Acute Contagious Diseases.

8:30 p. m.—Smoker, Vaudeville, Dutch Lunch, Annual Election.

June 7th—Providence Hospital—A. E. McMurdie in charge.

I. S. Gellert, Pre-Natal Care. F. T. F. Stephenson, Medicine. R. E. Mercer, Tonsils, Adenoids and Nasal Development. H. W. Yates, Gynecology. Carl Beck, Chicago, Ill., Cancer. Dr. D. R. Clark, Paretic Dementia. E. J. Panzner, General Surgery. J. E. Davis, Diagnosis of Infections of the Vagina, Uterus and Adnexa, with Case Illustrations. J. H. Dempster, Corneal Ulcer. I. L. Polozker, Diseases of Children. Robert Beattie, Ophthalmology.

8:00 p. m. Graduation Exercises, Knights of Columbus Hall. Rev. M. S. Rice, Speaker.

Section officers were elected as follows:

Medicine:

Chairman—Walter J. Wilson, Detroit.

Secretary—Wm. Northrop, Grand Rapids.

Surgery:

Chairman—Joseph H. Andries, Detroit.

Secretary—F. C. Witter, Petoskey.

Gynecology and Obstetrics:

Chairman—G. A. Kamperman, Detroit.

Secretary—H. J. Vandenburg, Grand Rapids.

Ophthalmology and Oto-Laryngology:

Chairman—L. A. Roller, Grand Rapids.

Secretary—C. N. Colver, Battle Creek.

The Chicago Medical Society wishes to invite the Physicians of the Army and Navy and the various examining boards of the State as their guests during the meeting of the A.M.A. Headquarters will be "Parlor A" La Salle Hotel.

We can assure you it will afford the Medical Society much pleasure to have the physicians engaged in the service visit Chicago during this meeting and will spare no means to make their visit pleasant.

The 69th Annual Meeting of the American Medical Association will be held in Chicago, June 10th to 14th. There will be several interesting meetings foremost of which are the evening Patriotic Meetings and the Thursday meeting in which all the sections combine. If it is possible to leave your work make it a point to attend this meeting. You will be well repaid.

Dr. J. C. Parnall, for three years head of the Jackson health department, has resigned and ac-

cepted the appointment as Superintendent of the University Hospital at Ann Arbor.

Dr. R. J. Harrington has been appointed health officer of Muskegon succeeding Dr. A. B. Eagan, resigned.

Dr. B. B. Godfrey has been appointed health officer of Holland.

Dr. A. H. Rockwell has been appointed full time health officer of Kalamazoo at an annual salary of \$3,600.

Dr. W. T. Dodge has been assigned charge of a Surgical Division at the Base Hospital at Camp Sherman. His address is Base Hospital, Camp Sherman, Chillicothe, Ohio.

Lt. Col. Angus McLean is expected to return the first part of June after a year of service with the Harper Unit "Overseas." Dr. C. D. Brooks of Detroit has been ordered to report to the Harper Unit July 1st.

It is reported that Unit Q, Dr. R. R. Smith, Grand Rapids, Commanding, sailed the middle of May.

President Hume has not completed his committee appointments so we are unable to publish them in this issue. They will appear in the July issue.

We learn from newspaper reports that Drs. V. C. Vaughan, Sr., and Walter Parker have been promoted and now hold the rank of Colonel.

## Deaths

Just as we go to press we are informed of the sudden death of Dr. A. T. Abrams of Dollar Bay on the evening of May 21st. Death was due to heart disease.

## TRIAL TUBES OF CHLOROZENE.

It is interesting to learn that The Abbott Laboratories of Chicago are sending to physicians, on request, convenient trial tubes of ten Chlorazene tablets. In view of the growing importance of the Dakin discoveries, we suggest to our readers that they avail themselves of this generous offer.

*Hall's Catarrh Cure.*—Another victim fails to get the hundred dollars offered in cases in which this preparation failed to effect a cure. The promoters informed its victim that before paying the guarantee, he would have to prove that his case was one of simple catarrh not complicated by any other disease and that he had taken sufficient of the cure. (*Jour. A.M.A.*, April 13, 1918, p. 1113).

## COUNTY SOCIETY NEWS

It is the Editor's desire to have this department of the Journal contain the report of every meeting that is held by a Local Society. County Secretaries are urged to send in these reports promptly

### HILLSDALE COUNTY

A called meeting of the Hillsdale County Medical Society to do the business of the Annual Meeting which was not held.

Meeting held at the office of Dr. C. T. Bower. Present Drs. McFarland, Frankhouser, Bower, Bell, and Fenton.

Meeting called to order by the President, Dr. O. G. McFarland.

The Secretary being absent the reading of the minutes was dispensed with.

The following officers on motion were elected for the present year:

President—O. G. McFarland, Montgomery.

Vice-President—S. B. Frankhouser, Hillsdale.

Secretary-Treasurer—D. W. Fenton, Reading.

Delegates—T. H. E. Bell, Reading.

Alternate—O. G. McFarland, Montgomery.

Dues for County and State Societies of \$4.50 each were paid by Drs. McFarland, Frankhouser, Bower, Bell and Fenton.

D. W. FENTON, Secretary.

### Book Reviews

LABORATORY METHODS OF THE UNITED STATES ARMY. Office of the Surgeon-General. Lea & Febiger, Philadelphia. Price, \$1.50.

This is the sixth Medical War Manual that sets forth in practical detail the laboratory methods employed in the army. It is of the convenient pocket size and will be found to be of untold value to the doctor at home as well as officers of the Reserve Corps.

LESSONS FROM THE ENEMY. How Germany Cares for Her War Disabled. J. R. McDill, M.D., F.A.C.S. Price, \$1.50. Lea & Febiger, Philadelphia.

This is the fifth War Manual and sets forth the author's observations during his service in the Hun country before our entrance into the war.

THE WAY OUT OF WAR. Notes on the Biology of the Subject. Robert T. Morris, M.D., F.A.C.S. Doubleday, Page & Co., New York.

Received.

MODERN OPERATIVE BONE SURGERY WITH SPECIAL REFERENCE TO THE TREATMENT OF FRACTURES. Charles George Gelger, M.D. 120 Illustrations, cloth, 286 pp. Price, \$3.00. F. A. Davis Co., Philadelphia.

A splendid presentation of the operative technic for the open treatment of fractures. There is here

collected the accepted methods of dealing with the various forms of bone trauma and the presentation is clear and practical. This is a welcome work upon the subject for it suggests the better way for surgical repairing of fractured bones.

CHEMICAL PATHOLOGY. Being a Discussion of General Pathology from the Standpoint of the Chemical Processes Involved. By H. Gideon Wells, Ph.D., M.D., Professor of Pathology in the University of Chicago, and in Rush Medical College, Chicago. Third Edition, Revised and Reset. Octavo 707 pages. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$4.25 net.

Received.

A TREATISE ON CLINICAL MEDICINE. By William Hanna Thompson, M.D., LL.D., formerly Professor of Practice of Medicine and of Diseases of the Nervous System in the New York University Medical College; Ex-President of the New York Academy of Medicine, etc. Second Edition Revised. Octavo volume of 678 pages. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$5.50 net.

Received.

DIFFERENTIAL DIAGNOSIS. Presented through an Analysis of 317 cases. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard University Medical School. Volume 2, Second Edition. Octavo of 709 pages, 254 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$6.00 net.

This second edition includes new text on arteriosclerosis vertigo, shell shock, gall-stone disease, gall-bladder, appendicitis and some additions to the chapters on neurasthenia, glands, fainting, pallor, palpitation, tremor, ascites and abdominal enlargements.

One who possesses the first edition will appreciate this increased value of the text. To the reviewer the work is one that needs must find a place in every physician's library. It is one of the essential texts of the present time. It helps immensely to solve the difficult problems of practice. We commend the work most highly.

MEDICAL SERVICE AT THE FRONT. Lt. Col. John McCombe, C.A.M.C. and Capt. A. F. Menzies, M.C., C.A.M.C. Illustrated. Pocket series. Price \$1.25. Lea & Febiger, Philadelphia.

This volume admirably sets forth the methods and arrangements for the care of the sick and wounded at the front. It describes fully the handling of the wounded up to and through the evacuation hospitals. It is based on the author's personal experience. It is a means of acquiring intimate insight as to the duties that will be required of our own medical officers. We commend to all our members in the service this volume.



A TEXT-BOOK OF OBSTETRICS. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Eighth edition, revised and reset. Octavo of 863 pages, with 715 illustrations, 38 of them in colors. Philadelphia and London: W. B. Saunders Company. 1918. Cloth, \$5.00 net.

The fact that this book has gone through eight editions is sufficient evidence of its popularity to rank it as one of the classics of medical literature. The merit of the book, however, especially in its present form, does not rest entirely upon the authority of Dr. Hirst as an obstetrician and gynecologist. A scholarly and well written treatise is desirable in any form but when such material is gotten up in the easily readable manner of this one with the well chosen topic heads and the truly beautiful and highly instructive illustrations, it becomes very valuable as a text and ready reference.

THE NERVOUS SYSTEM AND ITS CONSERVATION. By Percy G. Stiles, Assistant Professor of Physiology in Harvard University; Instructor in Boston School of Physical Education. Second edition, revised. 12mo. of 240 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth, \$1.50 net.

While this book is written more particularly for the university student the practitioner will find many points of interest in it. The first ten chapters deal with the elements of nervous anatomy and physiology. Only the barest essentials of anatomy which are necessary to the understanding of physiological principles are considered. The physiology is touched on again only sufficiently to show the student the conceptions on which the principles of mental hygiene are based and to make him familiar with the terms used in the discussion of mental and nervous phenomena. The medical man will be interested chiefly in the latter chapters of the book which deal with the subjects of mental habits, emotions, sleep, causes of nervous impairment, effect of drugs such as caffeine and alcohol on the nervous system, etc. The author has enriched the psychology of Wm. James by many interesting observations of his own. In fact, there is much in his style to remind one of the clear, concise writings of that real American scholar.

### Miscellany

*Misbranded Nostrums.*—The following are some "patent medicines" which the federal authorities held to be sold under false claims: Ascatco, containing 13 per cent. alcohol and some opium. Mexican Oil, containing over 57 per cent. alcohol, together with essential oils, glycerin, red pepper, eucalyptol, menthol and a small amount of opium alkaloids. Persil, containing 40 per cent. alcohol. Though claimed to contain, in addition, asparagus, parsley, celery, buchu, and juniper berries, it contained no appreciable quantities of celery, buchu,

juniper, asparagus or parsley. Dr. D. Kennedy's Favorite Remedy, containing 18 per cent. alcohol, nearly 50 per cent. sugar, and over 4 per cent. potassium acetate, with methyl salicylate, aloes, licorice and oil of sassafras. Our Standard Remedy, tablets containing rhubarb, senna, scoparius, licorice, red pepper and some ammonia compound with indications of aloes. Dr. King's Throat and Lung Balsam, claimed to relieve coughs and colds and consumptive patients in the last stages of the disease. "White Pine Expectorant and White Pine Balsam" (Allan-Pfeiffer Chemical Co.), a syrup containing alkaloid (probably morphin), chloroform, alcohol, benzoic acid and plant extract, but no extract or tar of white pine. California Tuna Tonic Tablets, pills containing iron carbonate and a small quantity of nux vomica alkaloids (strychnin, etc.) Alorine Antiseptic Suppository, containing quinin sulphate, boric acid and tannic acid. St. Joseph's Quick Relief, containing 32 per cent. alcohol with Peru balsam, camphor and red pepper. "Andrews' Wine of Life Root or Female Regulator," containing over 14 per cent. alcohol, sugar, methyl salicylate and tannin. "Andrews' Wine of Life Root Annex Powders," composed of sodium chloride and sodium bicarbonate, with a small amount of sodium carbonate. Clark Stanley's Snake Oil Liniment, a light mineral oil mixed with about 1 per cent. of fatty oil, red pepper and possibly a trace of camphor and turpentine. (*Jour. A.M.A.*, April 20, 1918, p. 1183).

*Neurosine and the Original Package Evil.*—Neurosine advertisements ask that only original bottles of Neurosine be dispensed when physicians prescribe the nostrum. The reason is obvious: the bottle has the name blown in the glass and thus is an invitation to the patient to purchase more on his own initiative and also to recommend the preparation to his friends. The danger to the public from the self-administration of mixtures of bromides, such as Neurosine, is obvious. Neurosine is said to contain potassium bromid, sodium bromid, ammonium bromid, zinc bromid, extract of lupulin, fluidextract cascara sagrada, extract of henbane, extract of belladonna, extract of cannabis indica, oil of bitter almond and aromatic elixir. This chemical blunderbuss has been advertised for use in insomnia, hysteria, neurasthenia, migraine, etc., etc. It has also been recommended for children suffering from chorea. In all the years that Neurosine has been exploited to physicians with such remarkable claims, we have never seen a report of a careful clinical study in which the product has been used under the conditions which scientific investigation demands. (*Jour. A.M.A.*, April 27, 1918, p. 1251).